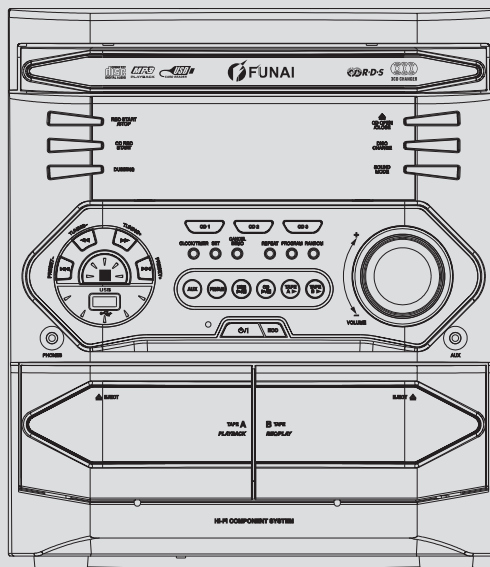


# MCD-338

## SERVICE MANUAL



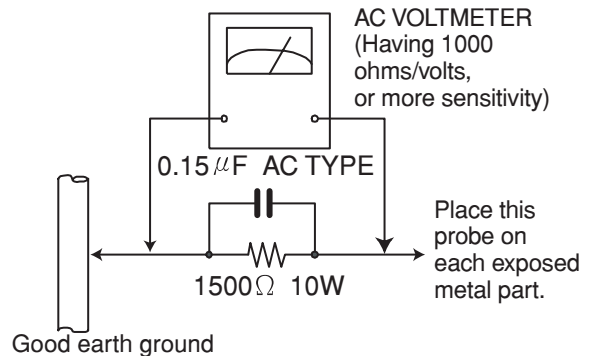
### Contents

Safety precautions .....	1- 2	Flow of functional	
Preventing static electricity .....	1- 3	operation until TOC read .....	1- 19
Important for laser products .....	1- 4	Maintenance of laser pickup .....	1- 20
Disassembly method .....	1- 5	Replacement of laser pickup .....	1- 20
Adjustment method .....	1- 17	Description of major ICs .....	1- 21

## Safety Precautions

1. This design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Services should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacture of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by ( $\triangle$ ) on the Parts List in the Service Manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement parts shown in the Parts List of Service Manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after re-assembling.
5. Leakage current check (Electrical shock hazard testing)  
After re-assembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock. Do not use a line isolation transformer during this check.

- Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal parts of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA AC (r.m.s.)
- Alternate check method  
Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having, 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500 $\Omega$  10W resistor paralleled by a 0.15  $\mu$ F AC-type capacitor between an exposed metal part and a known good earth ground. Measure the AC voltage across the resistor with the AC voltmeter. Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Voltage measured Any must not exceed 0.75 V AC(r.m.s.). This corresponds to 0.5 mA AC(r.m.s.).



## Warning

1. This equipment has been designed and manufactured to meet international safety standards.
2. It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
3. Repairs must be made in accordance with the relevant safety standards.
4. It is essential that safety critical components are replaced by approved parts.
5. If mains voltage selector is provided, check setting for local voltage.

## $\triangle$ CAUTION

**Burrs formed during molding may be left over on some parts of the chassis. Therefore, pay attention to such burrs in the case of performing repair of this system.**

# Preventing static electricity

## 1. Grounding to prevent damage by static electricity

Electrostatic discharge (ESD), which occurs when static electricity stored in the body, fabric, etc. is discharged, can destroy the laser diode in the traverse unit (optical pickup). Take care to prevent this when performing repairs.

## 2. About the earth processing for the destruction prevention by static electricity

In the equipment which uses optical pick-up (laser diode), optical pick-up is destroyed by the static electricity of the work environment.

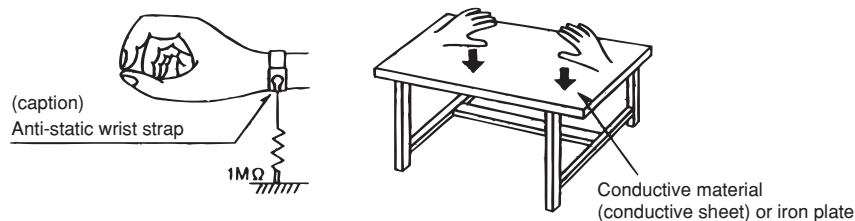
Be careful to use proper grounding in the area where repairs are being performed.

### 2-1 Ground the workbench

Ground the workbench by laying conductive material (such as a conductive sheet) or an iron plate over it before placing the traverse unit (optical pickup) on it.

### 2-2 Ground yourself

Use an anti-static wrist strap to release any static electricity built up in your body.



## 3. Handling the optical pickup

1. In order to maintain quality during transport and before installation, both sides of the laser diode on the replacement optical pickup are shorted. After replacement, return the shorted parts to their original condition. (Refer to the text.)
2. Do not use a tester to check the condition of the laser diode in the optical pickup. The tester's internal power source can easily destroy the laser diode.

## 4. Handling the CD changer unit (optical pickup)

1. Do not subject the CD changer unit (optical pickup) to strong shocks, as it is a sensitive, complex unit.
2. Cut off the shorted part of the flexible cable using nippers, etc. after replacing the optical pickup. For specific details, refer to the replacement procedure in the text. Remove the anti-static pin when replacing the CD changer unit. Be careful not to take too long a time when attaching it to the connector.
3. Handle the flexible cable carefully as it may break when subjected to strong force.
4. It is not possible to adjust the semi-fixed resistor that adjusts the laser power. Do not turn it.

### Attention when traverse unit is decomposed

\* Please refer to “Disassembly method” in the text for pick up and how to detach the CD changer mechanism.

1. Remove the CD changer unit.
2. Disconnect the harness from connector on the CD motor board.
3. Solder is put up before the card wire is removed from connector Cn601 on the main board as shown in Fig.1 and Fig. 2. (When the wire is removed without putting up solder, the CD pick-up assembly might destroy.)
4. Please remove solder after connecting the card wire with CN601 when you install picking up in the substrate.

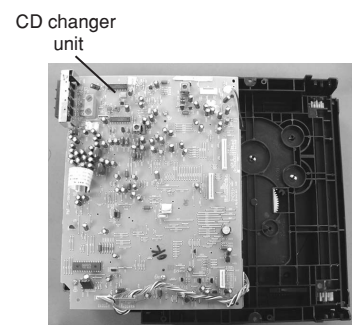


Fig.1

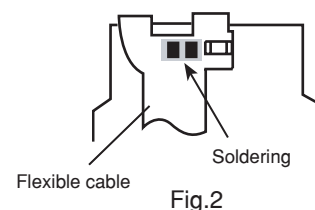


Fig.2

## Important for laser products

### 1. CLASS 1 LASER PRODUCT

2. **DANGER** : Invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.

3. **CAUTION** : There are no serviceable parts inside the Laser Unit. Do not disassemble the Laser Unit. Replace the complete Laser Unit if it malfunctions.

4. **CAUTION** : The compact disc player uses invisible laser radiation and is equipped with safety switches which prevent emission of radiation when the drawer is open and the safety interlocks have failed or are defeated. It is dangerous to defeat the safety switches.

5. **CAUTION** : If safety switches malfunction, the laser is able to function.

6. **CAUTION** : Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

**⚠ CAUTION** Please use enough caution not to see the beam directly or touch it in case of an adjustment or operation check.

**CAUTION** : Visible and invisible laser radiation when open and interlock failed or defeated. AVOID DIRECT EXPOSURE TO BEAM. (e)

**VARNING** : Synlig och osynlig laserstrålning när den öppnas och spärren är urkopplad. Betrakta ej strålen. (s)

**ADVARSEL** : Synlig og usynlig laserstråling når maskinen er åben eller interlocken fejler. Undgå direkte eksponering til stråling. (d)

**VARO** : Avattaessa ja suojalukitus ohitettuna tai viallisena olet alttiina näkyvälle ja näkymättömälle lasersäteilylle. Vältä säteen kohdistumista suoraan itseesi. (f)

## FUSE CAUTION

### CAUTION:

REPLACE WITH SAME TYPE AND RATING FUSE (S).

### ATTENTION:

REPLACER PAR UN(LES) FUSIBLE(S) DE MÊME TYPE ET DE MÊME VALEUR



## Disassembly method

Commence disassembly of the set by removing the main units and then proceed to the components and assemblies inside the units.

### Replacement of the fuses and the power IC

- Top cover
- CD changer unit
- Front panel assembly
- Chassis unit
  
- CD changer unit
  - Removing the main PCB
  - Removing the CD changer mechanism assembly
  - Removing the CD pickup
  - Replacing the loading motor and belt of the CD changer tray
  - Replacing the CD tray rotor belt of CD changer, and removing the motor
  
- Front panel assembly
  - Removing the cassette deck mechanism
  - Removing the earphone jack PCB
  - Removing the control/FL PCB
  - Removing the cassette deck main motor, and replacing the main belts
  - Removing the leaf switches of the cassette deck mechanism
  - Removing the cassette deck heads
  
- Chassis unit
  - Removing the 3-pin regulator
  - Removing the power amp and supply PCB and the Power Trans PCB
  - Removing the sub power PCB

## <Disassembly of the main blocks of the set>

### Replacement of the fuses and the power IC

#### ▣ Replacing the fuses (See Fig.1)

- ▣ Prior to performing the following procedure, remove the left side BOARD.
1. Replace the fuses inside.

**[Caution]** Be sure to use fuses with the specified ratings.

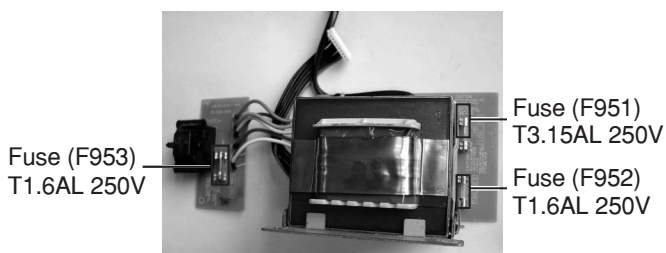


Fig.1

#### ▣ Replacing the heat sink cover (See Fig.3)

1. Remove four screws **B** from the rear panel.
2. Pull the heat sink cover outward.

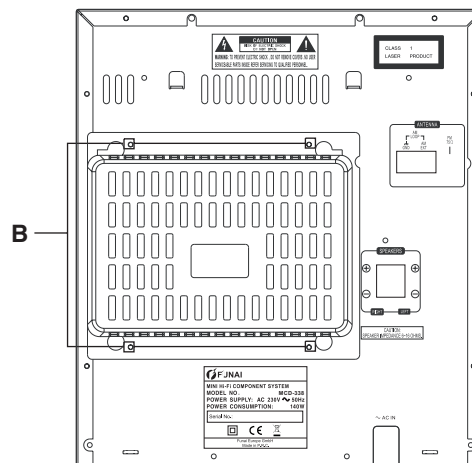


Fig.3

#### ▣ Replacing the power IC (See Fig.2)

- ▣ Prior to performing the following procedure, remove the top cover.
1. Remove the two screws **A** from the heat sink between the power IC.
  2. Remove the solder fixing the power IC.

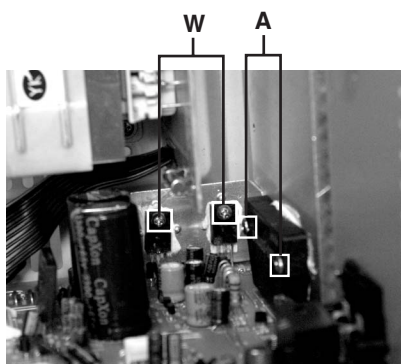


Fig.2

## □ Removing the top cover

(See Fig.4 and 5)

1. Remove six screws **C** that retain the top cover from the panel rear of the body.
2. Remove six screws **D** that retain the top cover from the two sides of the body.
3. Remove the top cover from the body by lifting it toward the rear.

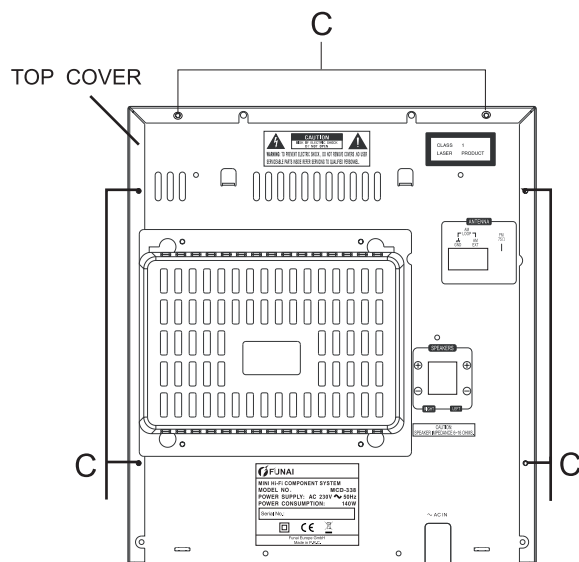


Fig.4

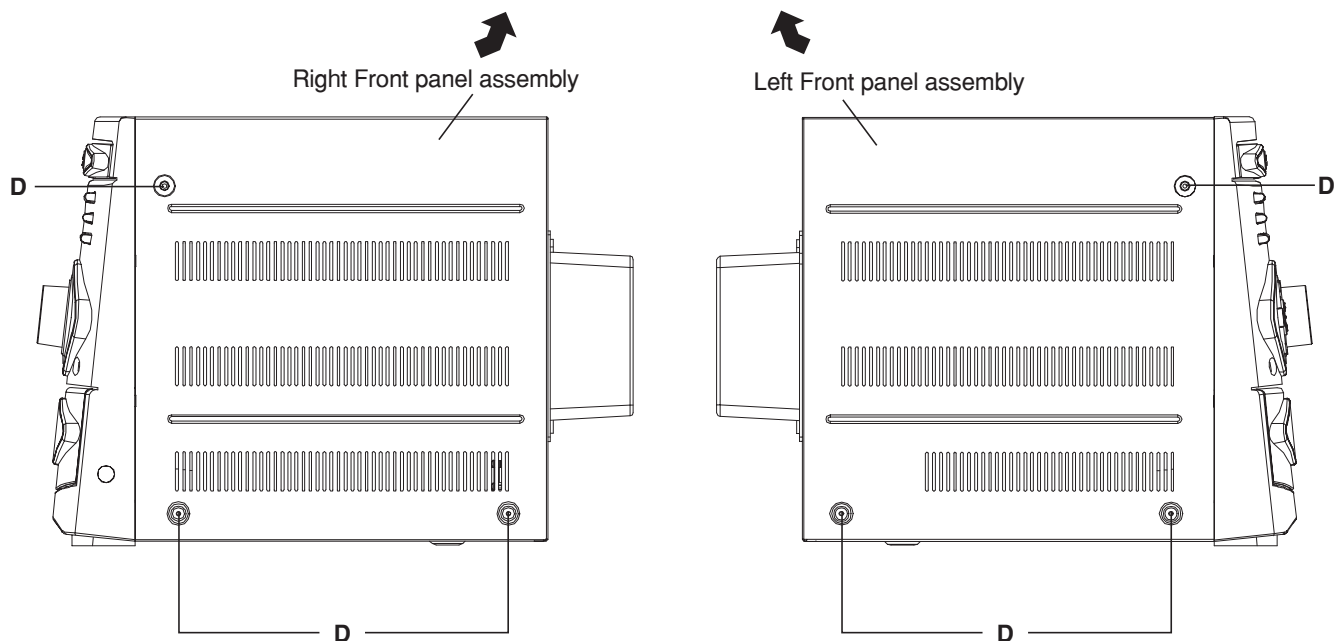


Fig.5

## □ Removing the CD changer unit (See Fig.6 to 9)

- Prior to performing the following procedures, remove the top cover.

**[Caution]** Although the CD mechanism unit can be removed without removing the CD tray panel, it is still recommended to remove it in order to prevent damage.

- From the front panel side of this set, push in the sections marked with arrows and pull out the CD tray toward the front.
  - Remove the CD tray panel by pushing both of its extremities upward in the direction of the arrows.
  - Push the CD tray deep into the set.
- Disconnect the cord wires from the main PCB CN403, CN201, CN601, CN401, CN402, and CN205.
  - From the rear of the set, remove two screws **E**, two screws **F** and four screws **G** on the front panel left and right side.
  - Handle the CD changer unit rear, take out the unit.



CD tray panel

Fig.7

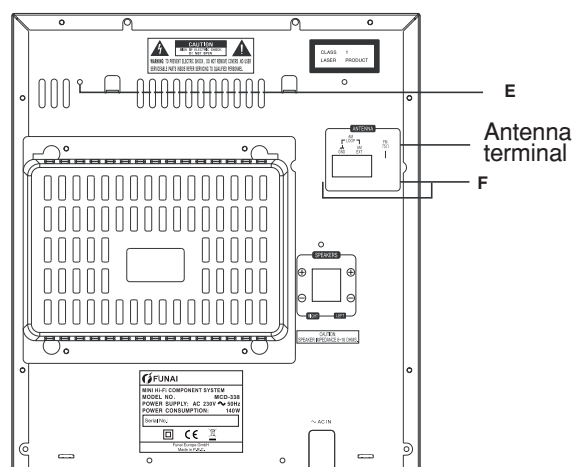


Fig.8

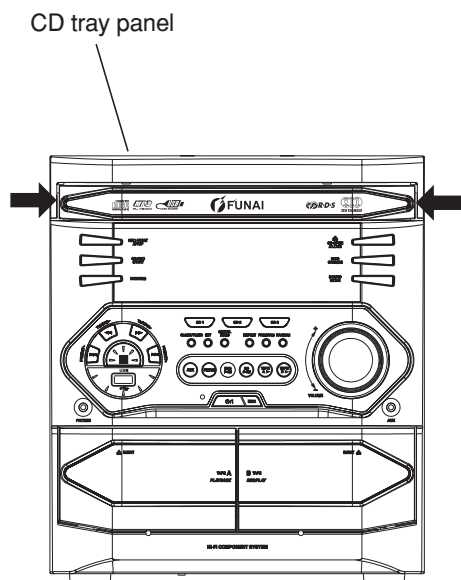


Fig.6

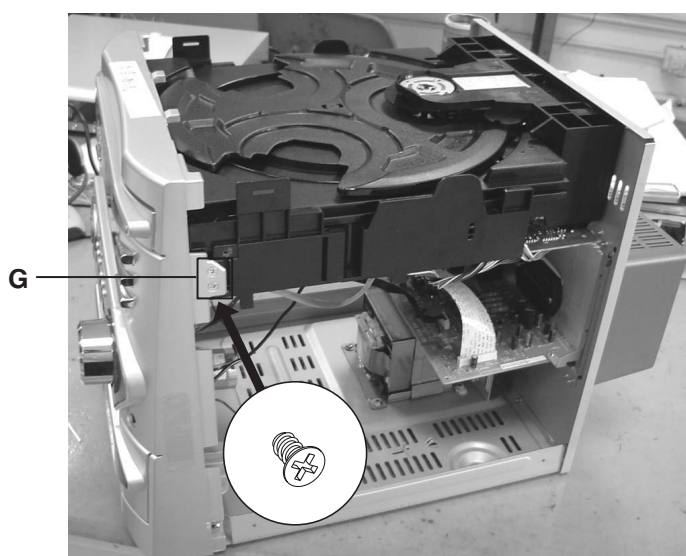


Fig.9

## ■ Removing the front panel assembly (See Fig.10 to 11)

- Prior to performing the following procedures, remove the top cover.
  - Also remove the CD changer unit.
1. Disconnect the parallel wire and the cord wire from the connectors J1, CN202 on the power AMP PCB.
  2. Remove one screws **H** retaining the front panel assembly onto the bottom of the body.
  3. Remove two screws **I** on the left and right side of the set retaining the panel front from the bottom and then remove then GND lug **b** that comes from the power amp and supply PCB.
  4. Disengage the claws **c** on both sides of the front panel assembly and then remove the assembly.

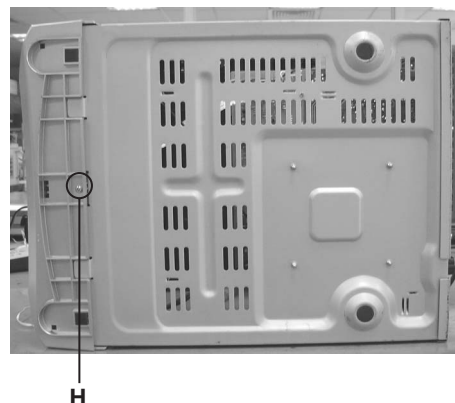


Fig.10

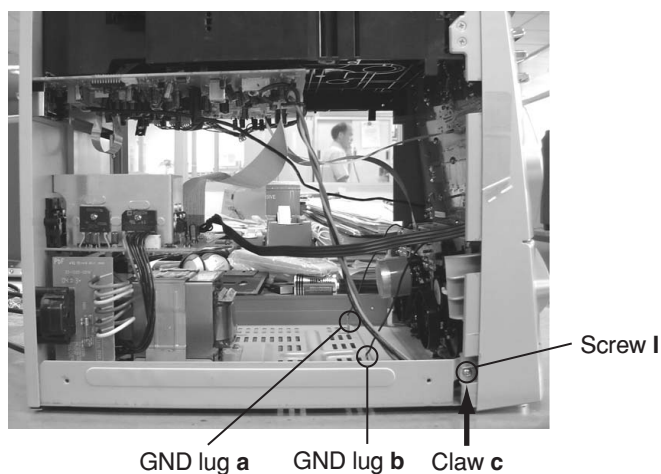


Fig.11

## <Disassembly of units and assembly inside this set>

### ■ Removing the MAIN PCB

(See Fig.12 to 13)

- Prior to performing the following procedures, remove the top cover.
  - Also remove the CD changer unit.
1. Disconnect the wires from CN702, CN703 on the main PCB, which is located on the back side of the CD changer unit.
  2. The four screws **J** that retain the CD PCB should be removed.
  3. Remove the CD PCB by pulling it toward the side where the CN701 is located.
  4. Using solder, short the CD pickup to connect to short round.

**[Caution]** After re-connecting the wires, be sure to remove the shorting solder from the GND connection.

5. Disconnect the card wire from the connector CN701 on the main PCB and then remove the main PCB.

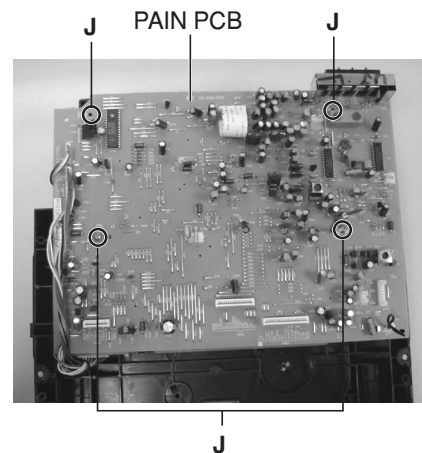


Fig.12

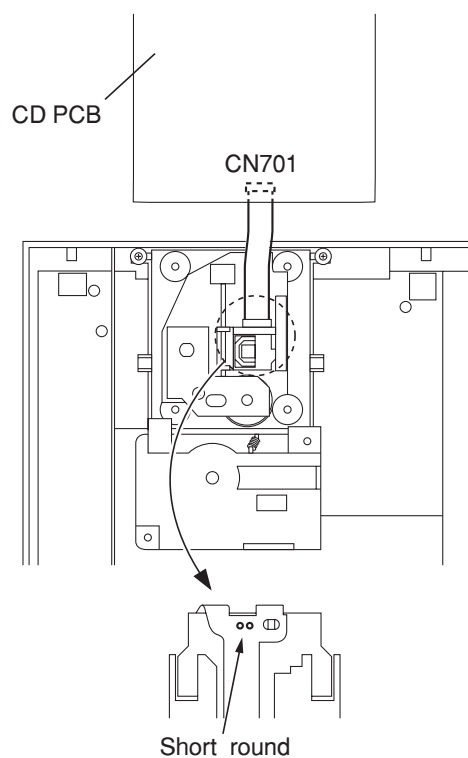


Fig.13

## ■ Removing the CD changer mechanism assembly (See Fig.14 to 15)

- Prior to performing the following procedures, remove the top cover.
  - Also remove the CD changer unit.
1. Turn the CD changer mechanism cover base and remove the screws **d** connecting the unit to the CD changer mechanism assembly.
  2. Removing four screws **e** retaining the CD mechanism holder assembly.

**[Caution]** When replacing the CD changer mechanism assembly, be sure not to mistake the positions of the silver color and copper color spring.

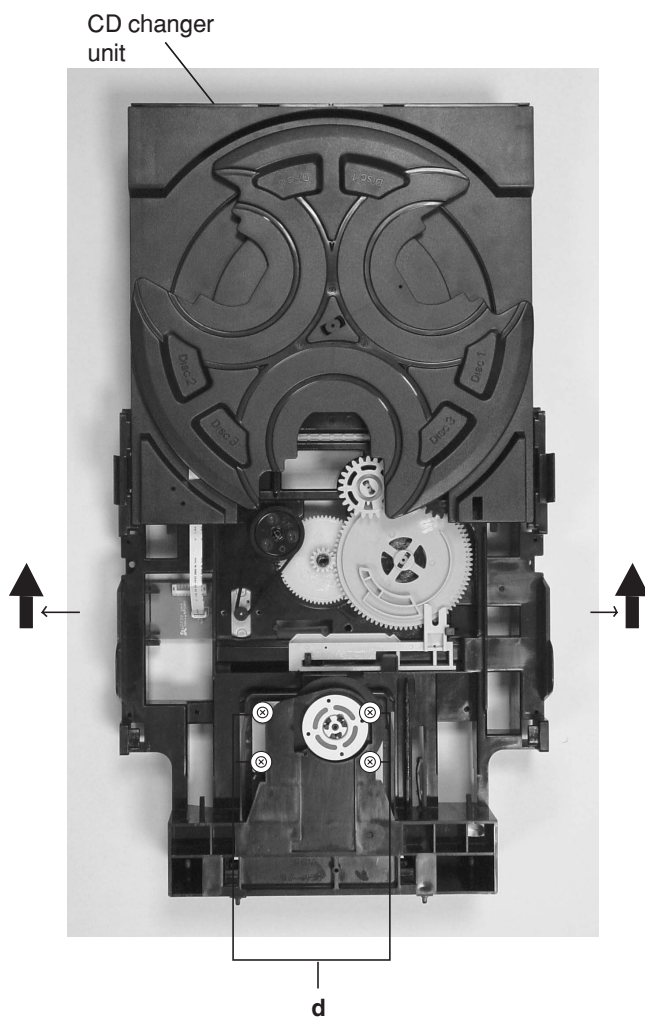


Fig.14

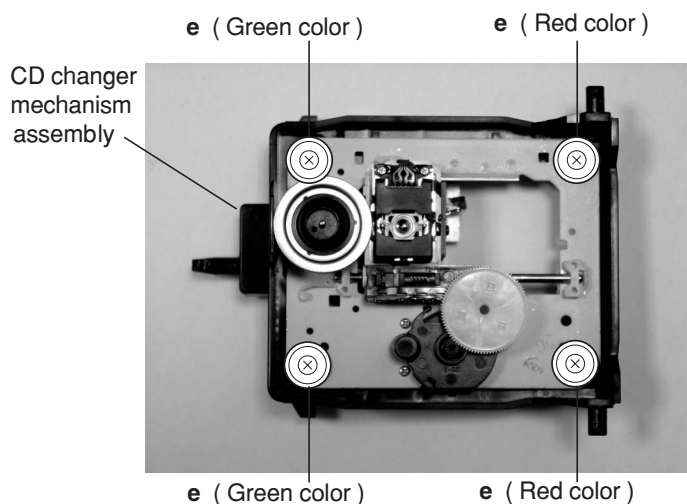


Fig.15



## ■ Removing the CD pickup (See Fig.16)

- Prior to performing the following procedures, remove the top cover.
- Also remove the CD changer unit.
- Also remove the CD changer mechanism.

1. Widen the section **f**.
2. While keeping the section **f** wide open, push the section **g** in the direction of the arrow to remove the shaft, and then remove the CD pickup.

## ■ Replacing the loading motor and rotor belt of the CD changer (See Fig .17)

- Prior to performing the following procedures, remove the top cover.
- Also open the CD changer tray.

1. Remove the two screws **L** retaining the CD changer tray loading motor.
2. Remove the two screws **M** retaining the gear plate and take it out, after remove the rotor belt from the pulley.

## ■ Replacing the CD turn table and removing the motor (See Fig. 19 )

- Prior to performing the following procedures, remove the top cover.
- Also remove the CD changer unit.

1. Remove the one screws **N** retaining the CD (Turn table).
2. Remove the two screws **O** retaining the stopper brackets on both sides of the CD changer unit.
3. Remove the stopper brackets from both sides of the CD changer unit.
4. Pull out the CD tray from the CD changer unit, all the way and lift the tray (u/~ ward) to remove.
5. Remove the gear and after push out the tray motor locker and pull out the tray motor from the CD tray.

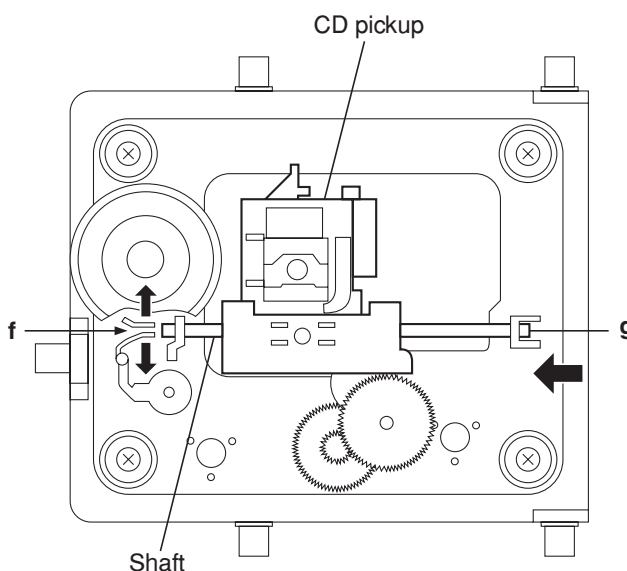


Fig.16

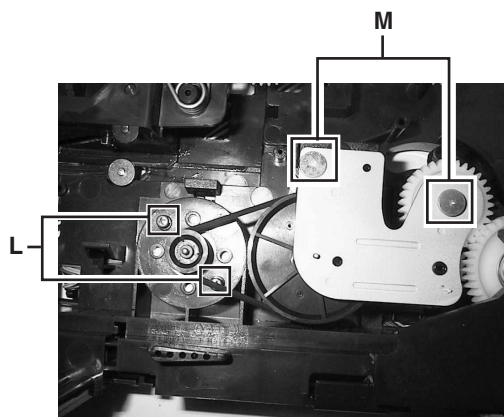


Fig.17

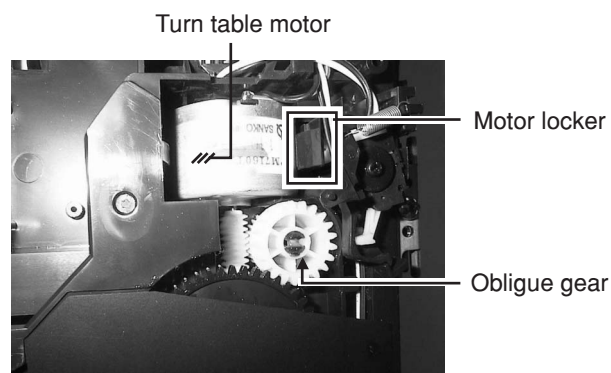


Fig.18

## □ Removing the cassette deck mechanism (See Fig.19)

- Prior to performing the following procedures, remove the top cover.
  - Also remove the CD changer unit.
  - Also remove the front panel assembly.
1. Remove six screws **Z** retaining the cassette deck mechanism.

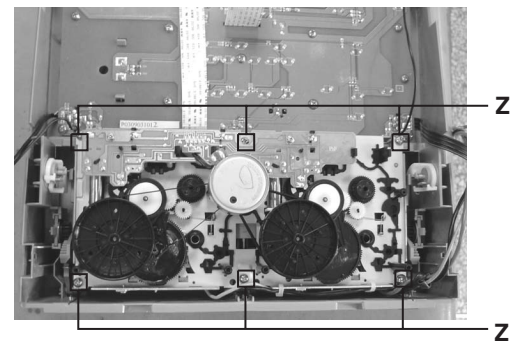


Fig.19

## □ Removing the key PCB (See Fig.20 to 22)

- Prior to performing the following procedures, remove the top cover.
- Also remove the CD changer unit.
- Also remove the front panel assembly.

1. Remove the volume knob from front cabinet that retains the key PCB.
2. Remove FIFTEEN screws **L1**.
3. Remove Two screws **L2** from the USB PCB.

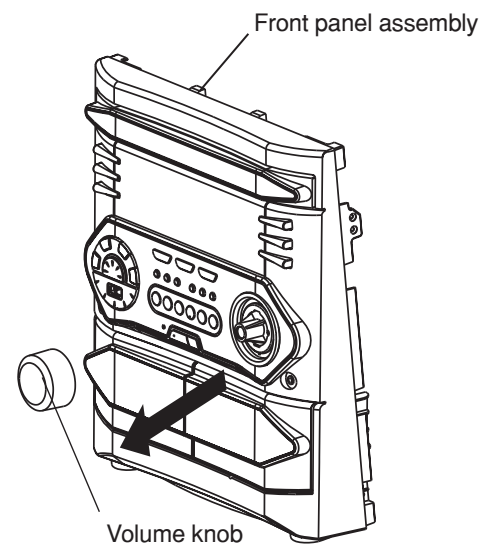
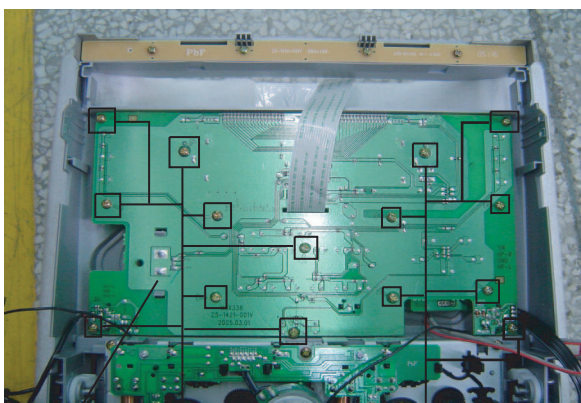
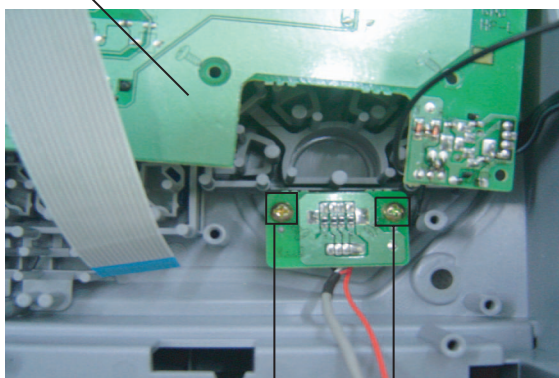


Fig.20



key PCB

L1



L2

Fig.21

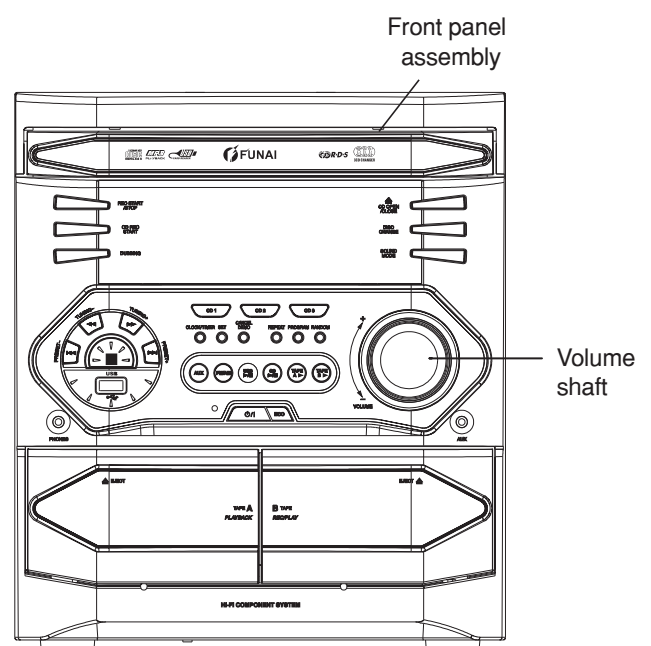


Fig.22

## ■ Removing the cassette deck main motor, and replacing the main belts

(See Fig.19, 23 and 24)

- Prior to performing the following procedures, remove the top cover and both sides board.
  - Also remove the CD changer unit.
  - Also remove the front panel assembly.
1. Remove six screws **Z** retaining the cassette deck mechanism. (Fig.19)
  2. Remove the cassette deck mechanism.
  3. Remove two screws **t** retaining the main motor from the front side of the cassette deck.

**[Caution]** After attaching the main motor, check the orientation of the motor and the polarity of the wires.

4. From the backside of the cassette deck, remove the main motor and two main belts.

**[Caution]** The lengths of the cassette A(playback only) and cassette B(record/play) main belts are different. When attaching the main belts, use the longer belt for cassette **A**.

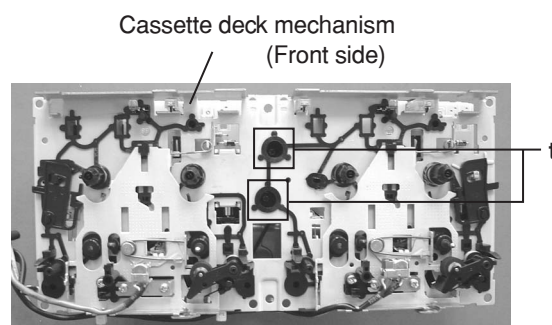


Fig.23

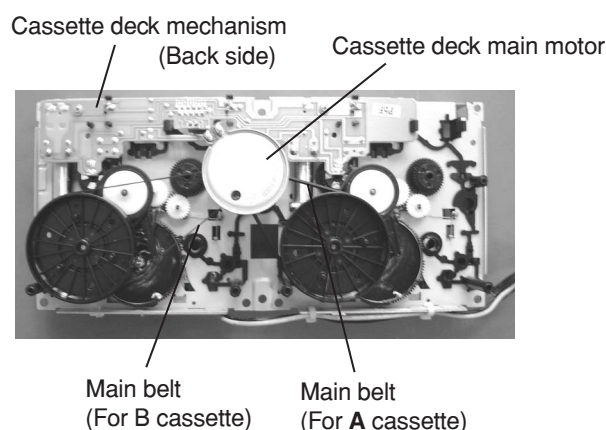


Fig.24

## ■ Removing the leaf switches of the cassette deck mechanism

(See Fig. 19 and 25)

- Prior to performing the following procedures, remove the top cover and both sides board.
  - Also remove the CD changer unit.
  - Also remove the front panel assembly.
1. Remove the six screws **Z** that retain the cassette deck mechanism. (Fig.19)
  2. Remove the cassette deck mechanism.
  3. Turn the cassette deck mechanism upside down.
  4. Remove the solder from around the leaf switches.
  5. Pull out the leaf switches from the front side of the cassette deck mechanism.

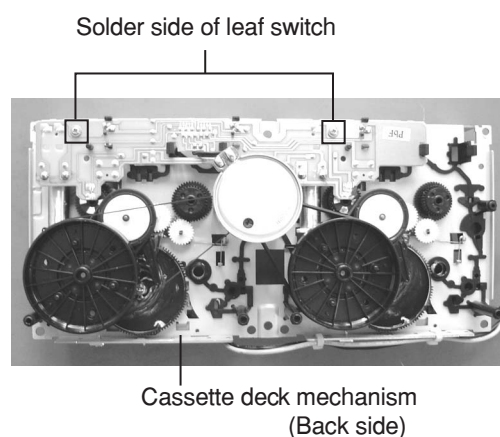


Fig.25

## ■ Removing the cassette deck heads (See Fig. 19 and 26)

- Prior to performing the following procedures, remove the top cover and both sides board.
  - Also remove the CD changer unit.
  - Also remove the front panel assembly.
1. Remove six screws **Z** that retain the cassette deck mechanism. (Fig.19)
  2. Remove the cassette deck mechanism and place it so that the front side faces up.
  3. Remove the solder from the bottom side of the head terminal and disconnect the wire.
  4. Remove screws **U** that retains the head.
  5. Remove screws **V** that retains the head.
  6. Hold the head and slide it in the direction of the arrow to remove it.

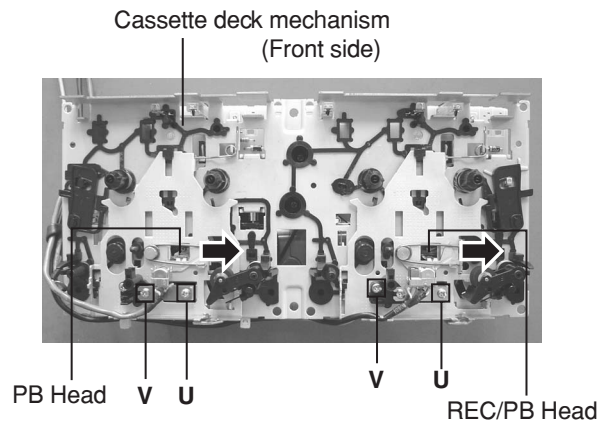


Fig.26

## ■ Removing the 3-pin regulator and bridge diode (See Q604, Q608, D614, D615 and Fig.27)

- Prior to performing the following procedures, remove the top cover and both sides board.
1. Remove two screws **A** that connect the heat sink.
  2. Remove two screws **W** that connect the heat sink.
  3. Remove the solder fixing the the 3-pin terminal regulator Q604, Q608.
  4. Remove the solder fixing the 4-pin bridge diode (D614, D615).

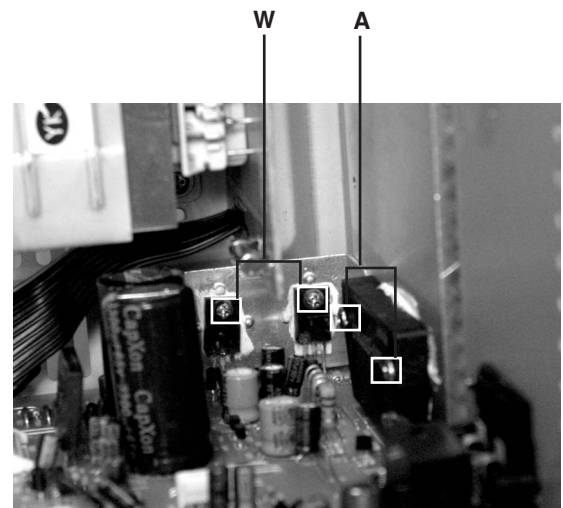


Fig.27

## □ Removing the power amp and supply PCB and the power trans PCB

(See Fig. 2, 28 to 30)

- Prior to performing the following procedures, remove the top cover and CD changer unit.

1. Remove four screws **B** from the rear panel. (Fig.3)
2. Pull the heat sink cover outward.
3. Remove four screws **AA** from the rear panel between the heat sink holder.
4. Remove four screws **YY** that retains the rear panel, and then remove the rear panel.
5. Disconnect the parallel wires from the connectors FW951 on the power trans PCB.
6. Remove screws **Z** that retain the power amp and supply PCB and then remove the assembly.
7. Remove the clamp of AC power cord from the chassis.
8. Remove four screws that retain the power trans PCB and then remove the assembly.

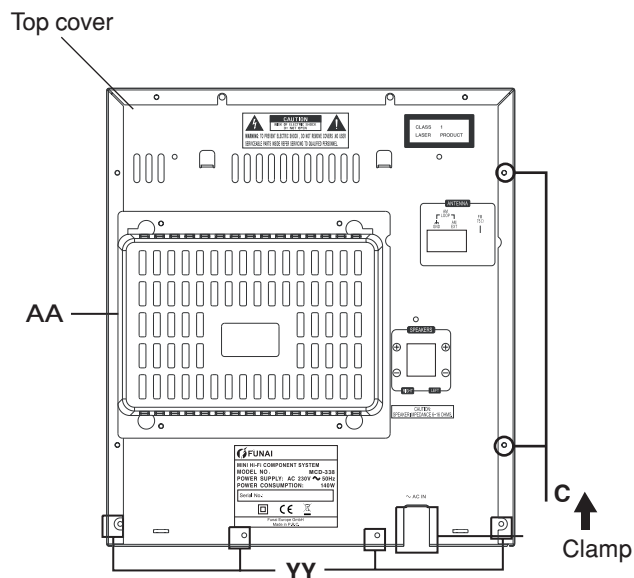


Fig.30

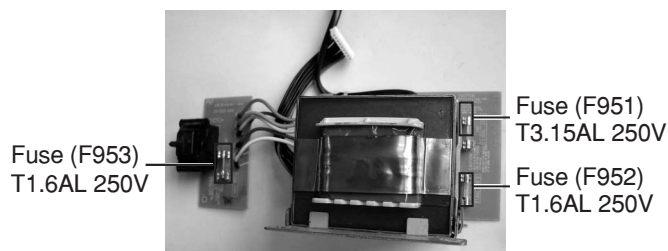


Fig.28

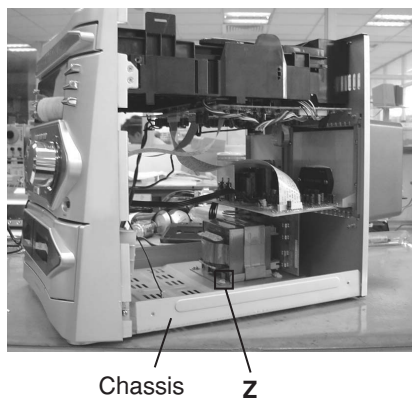
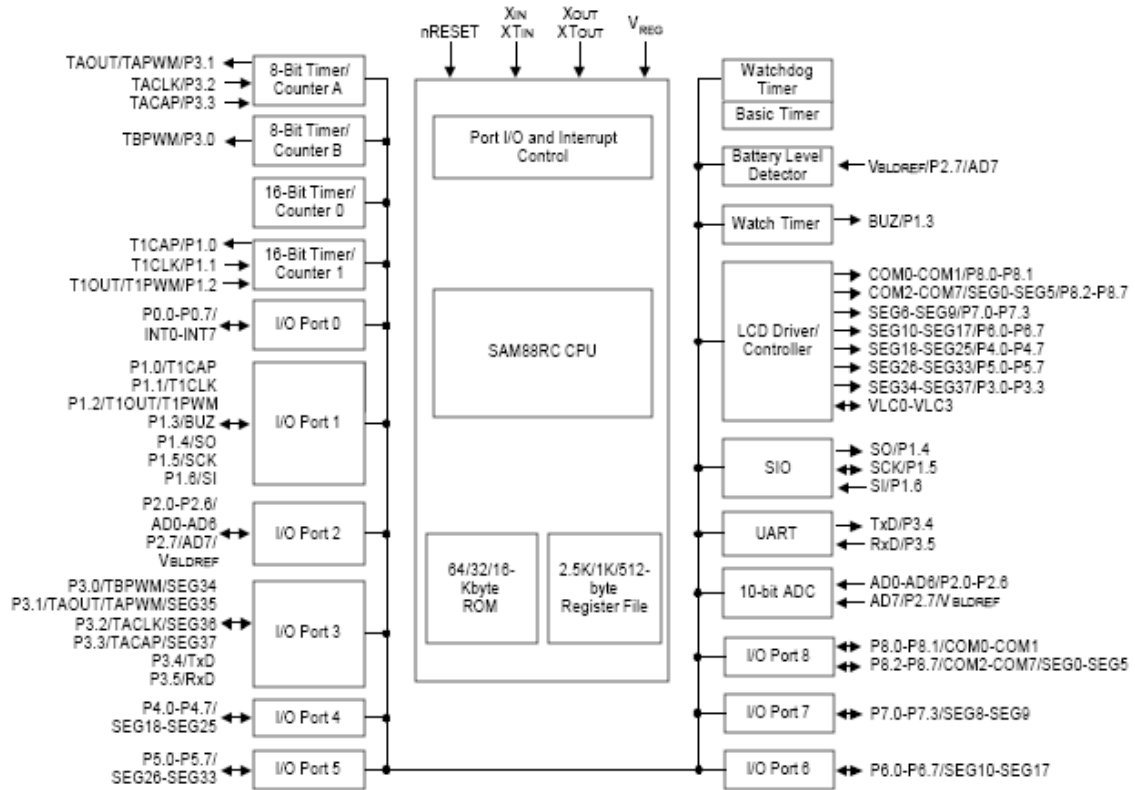


Fig.29

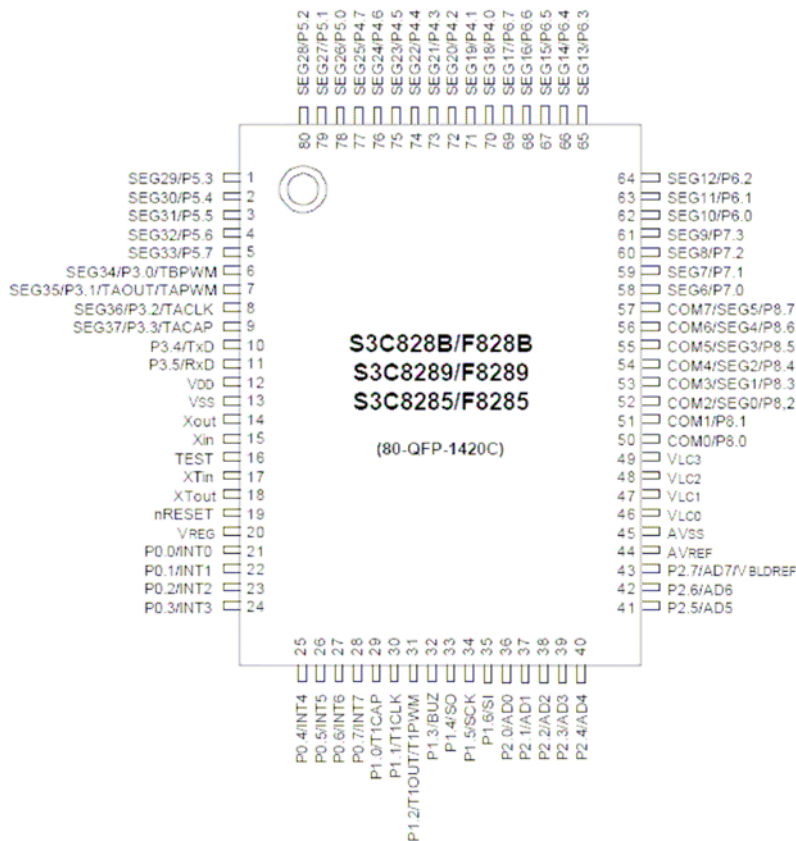


## ■ S3F828B (IC301) MCU

### 1: BLOCK DIAGRAM

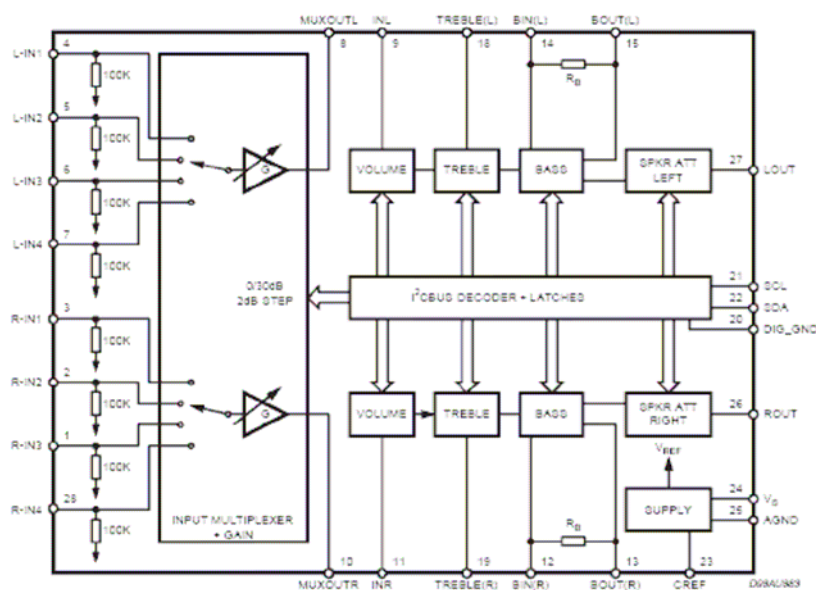


### 2. PIN NAME

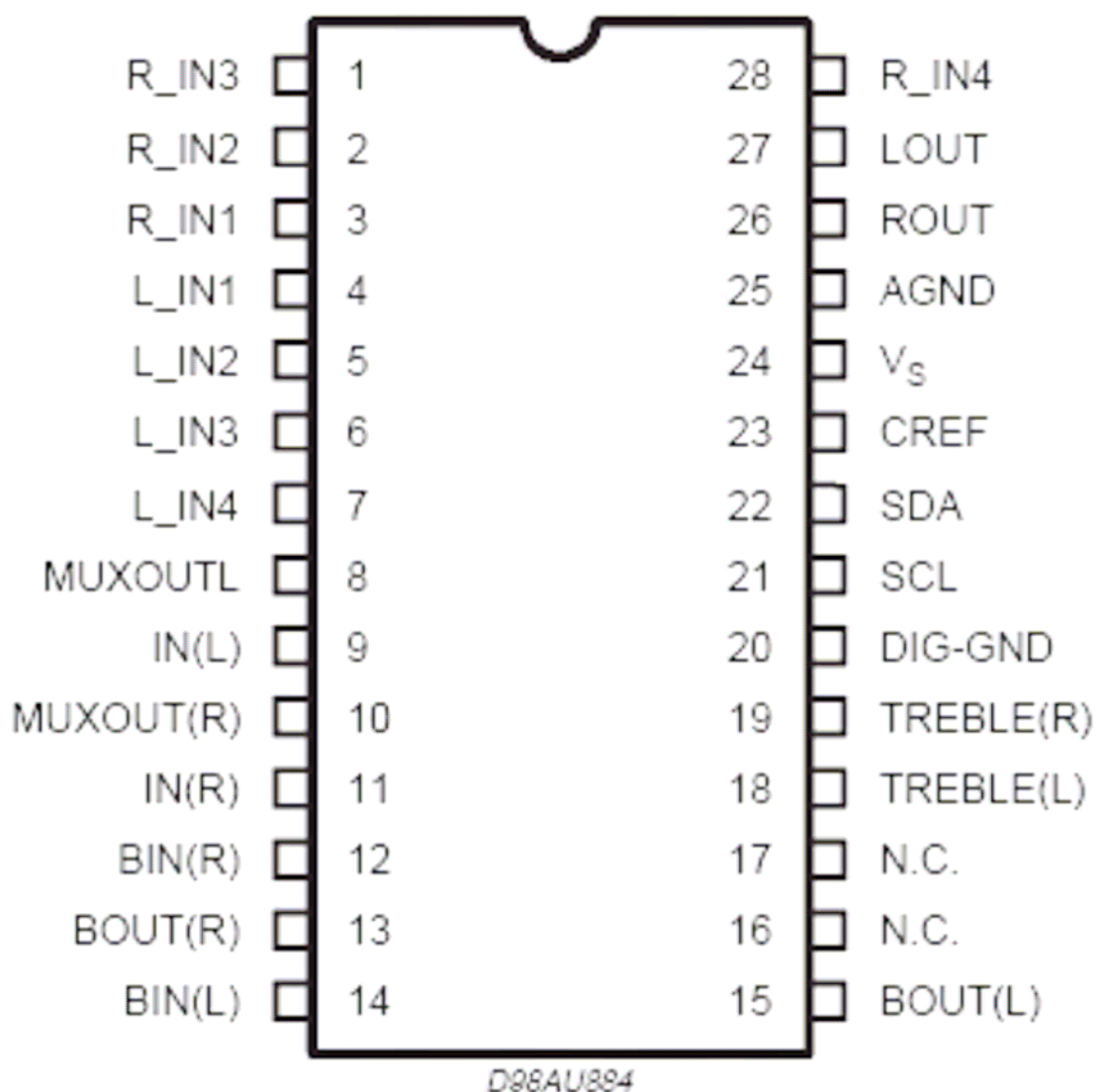


## ■ TDA7440D (IC501) AUDIO PROCESSOR IC

### 1: BLOCK DIAGRAM

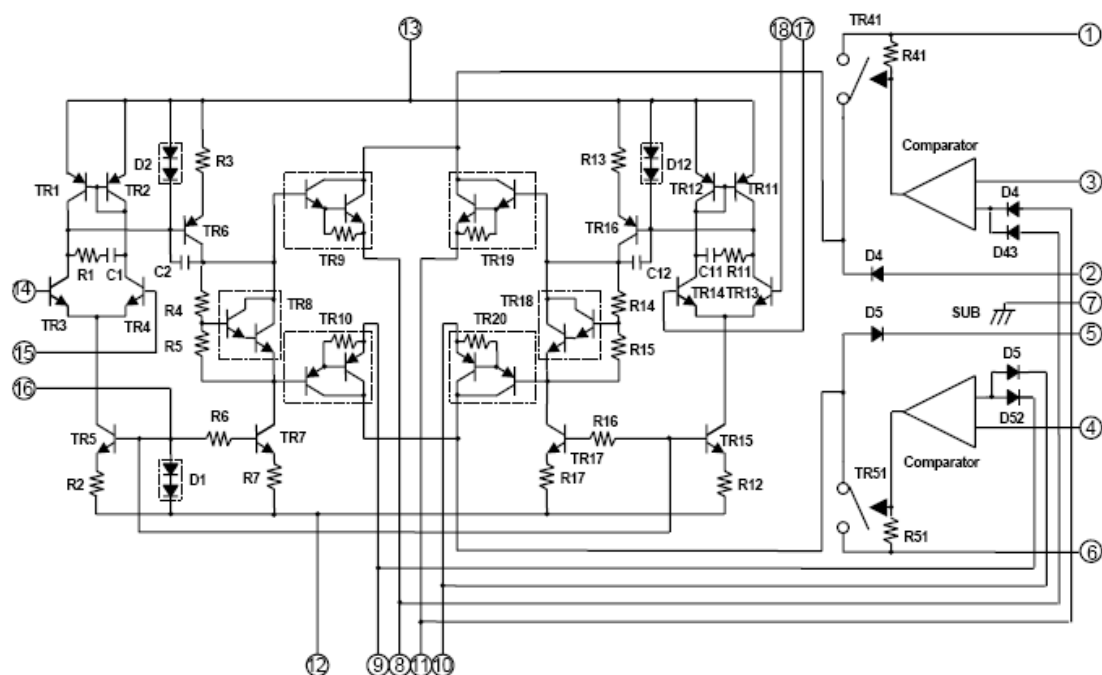


### 2.PIN NAME





## 1:BLOCK DIAGRAM



Technical drawing of a rectangular electronic component, likely a power transistor or diode, showing top and side views with dimensions in millimeters.

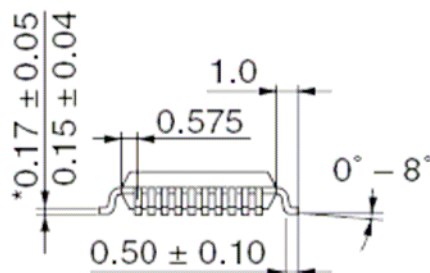
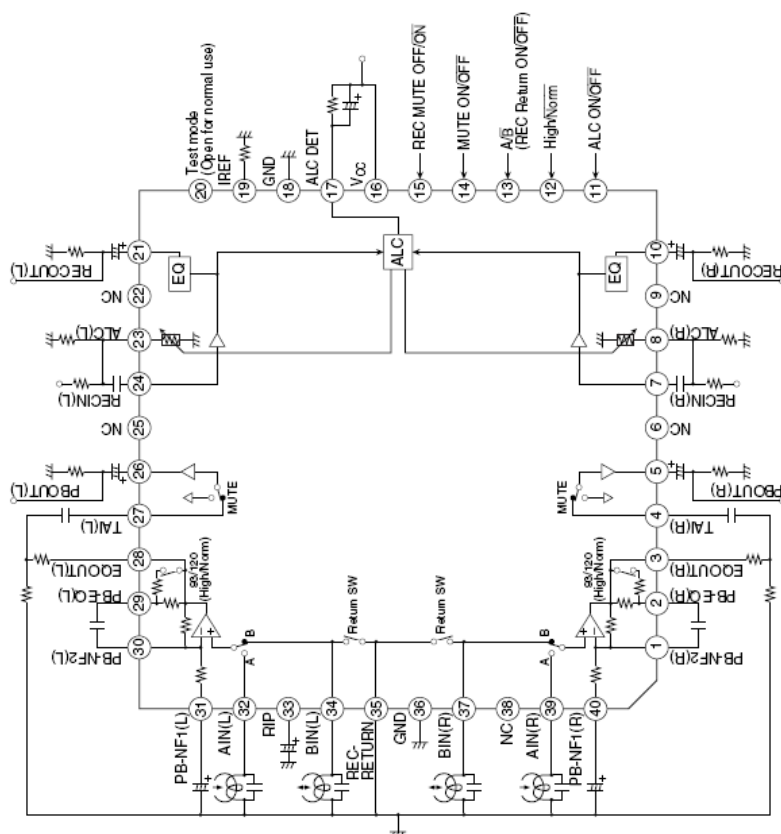
**Top View Dimensions:**

- Overall width: 64
- Overall height: 36.6
- Internal width (excluding mounting tabs): 55.6
- Mounting tab width (left):  $3.6^{+0.2}_{-0.1}$
- Mounting tab width (right):  $0.5^{+0.2}_{-0.05}$
- Distance from left edge to mounting hole center: 5
- Distance from right edge to mounting hole center: 18.7
- Radius of mounting holes: (R1.8)
- Internal feature (circular pattern of 8 holes): 17X2.54=43.18
- Distance from left edge to internal feature: 2.54 (6.21)
- Distance from right edge to internal feature: 18

**Side View Dimensions:**

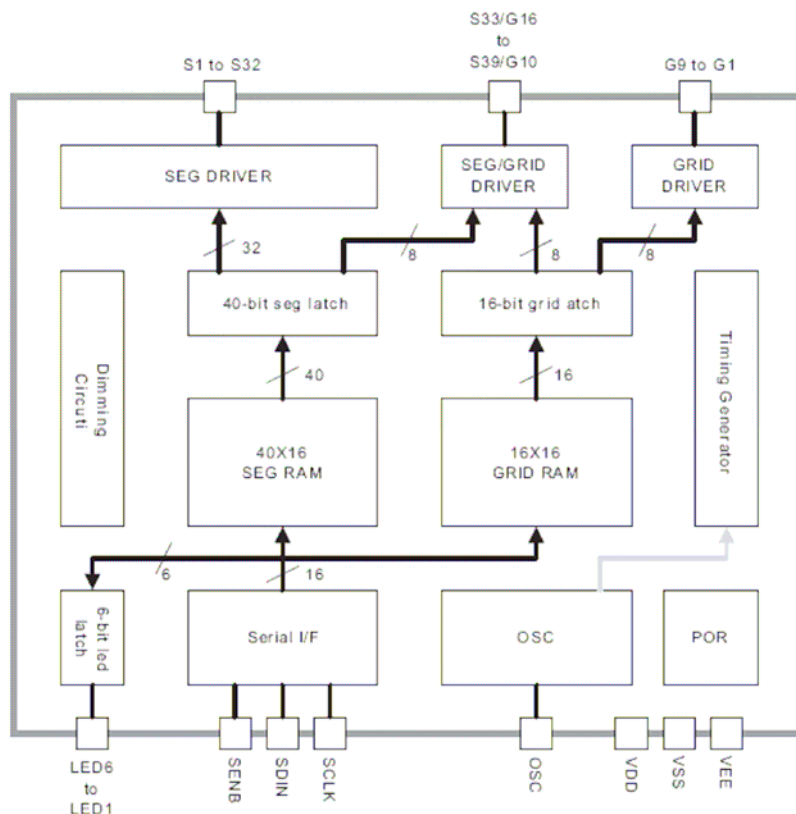
- Overall height: 25.8
- Top flange width: 9
- Distance from top flange to mounting hole center: 4
- Mounting hole diameter:  $0.4^{+0.2}_{-0.05}$
- Distance from mounting hole center to bottom edge: 5.5
- Bottom flange width: 2.9

## 1:Block Diagram



## ■ S5G5128A (IC202) VFD DRIVER IC

### 1.BLOCK DIAGRAM

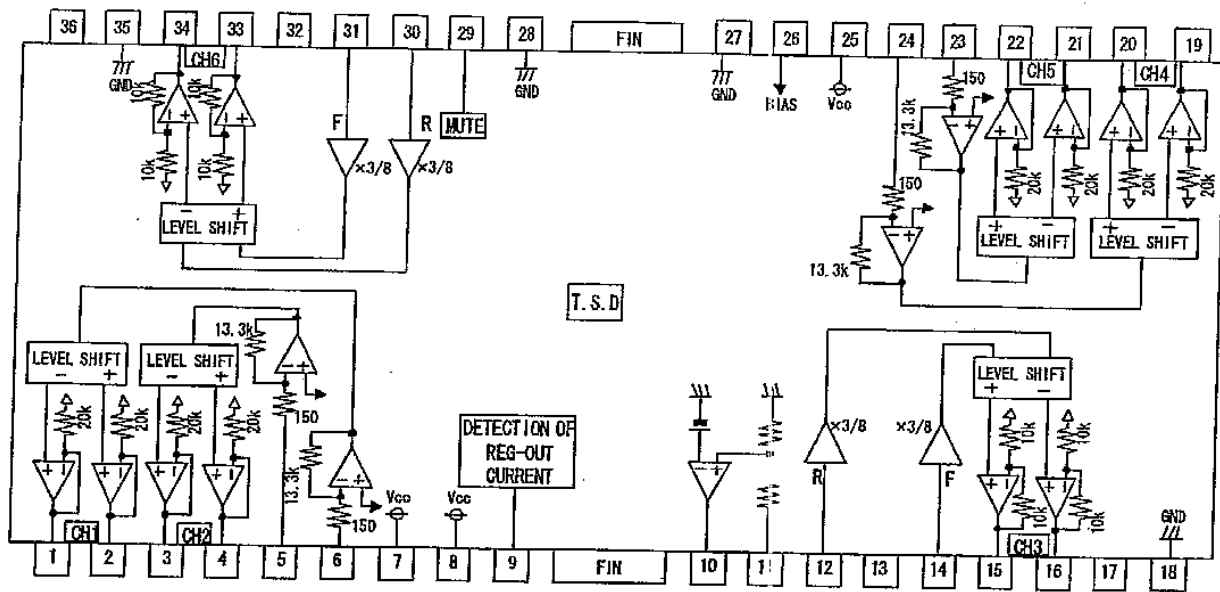


### 2. Pin description

Pin No.	Name	Function	IN/OUT
1 to 3	S3 to S1	Segment driver output pins (segment only). This is P-ch open-drain output with pull-down resistor	O
5 to 10	LED6 to LED1	6 LED driver output ports. This is a CMOS output pin.	O
11	SENB	Serial Interface Enable All shifted data is latched into the corresponding register at the rising edge of SENB.	I
12	SDIN	Serial Interface Data IN Input serial data at the rising edge of the shift clock.	I
13	SCLK	Serial Interface Clock Reads serial data at the rising edge when SENB is low	I
15	OSC	Connected to an external resistor or an RC oscillator circuit.	I/O
18 to 26	G1 to G9	Grid driver output pins (Grid only). This is push-pull CMOS output.	O
27 to 33	S39/G10 to S33/G16	Segment or Grid driver output pins. These pins are selectable for segment or grid driving. This is P-ch open drain output with pull-down resistor	O
34 to 47	S32 to S19	Segment driver output pins (segment only). This is P-ch open-drain output with pull-down resistor	O
50 to 64	S18 to S4	Segment driver output pins (segment only). This P-ch open-drain output with pull-down resistor	O
16,49	VDD	Positive power (Internally connected)	PWR
4,14	VSS	Ground (Internally connected)	GND
17,48	VEE	Negative power for driving VFD Panel (Internally connected)	PWR

■ BA5927FM (IC702) Power amplifier 5-channel built-in.

1:BLOCK DIAGRAM

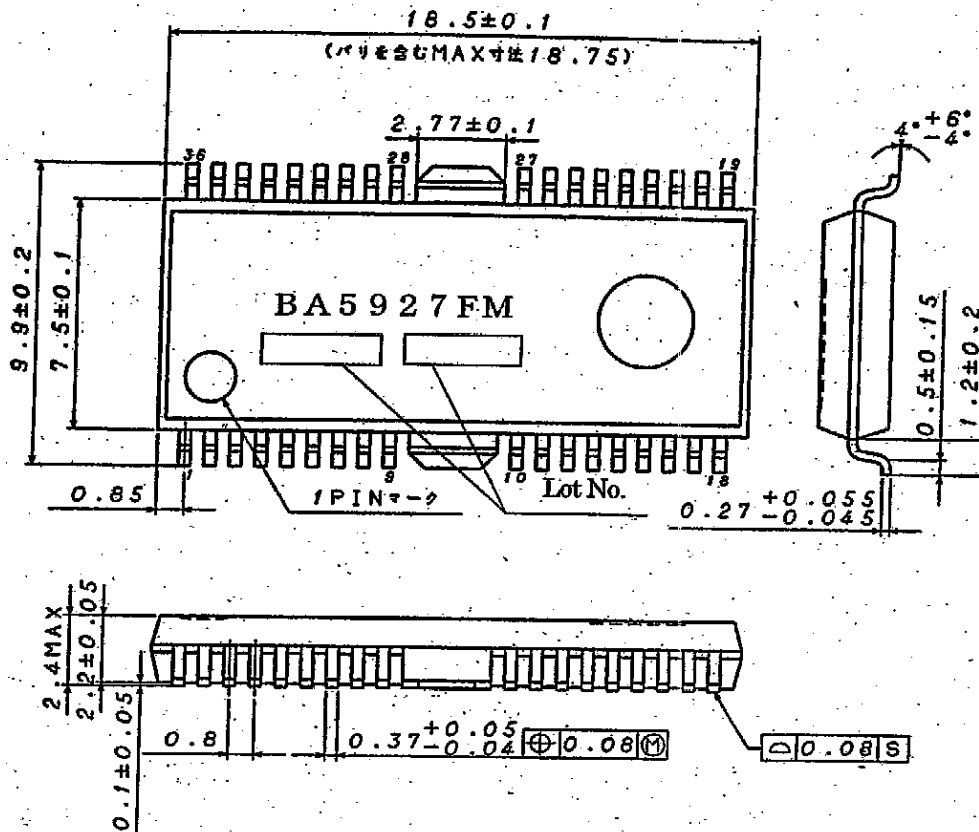


T. S. D : Thermal shut down circuit

D : Drive buffer

Unit of resistor : [ $\Omega$ ]

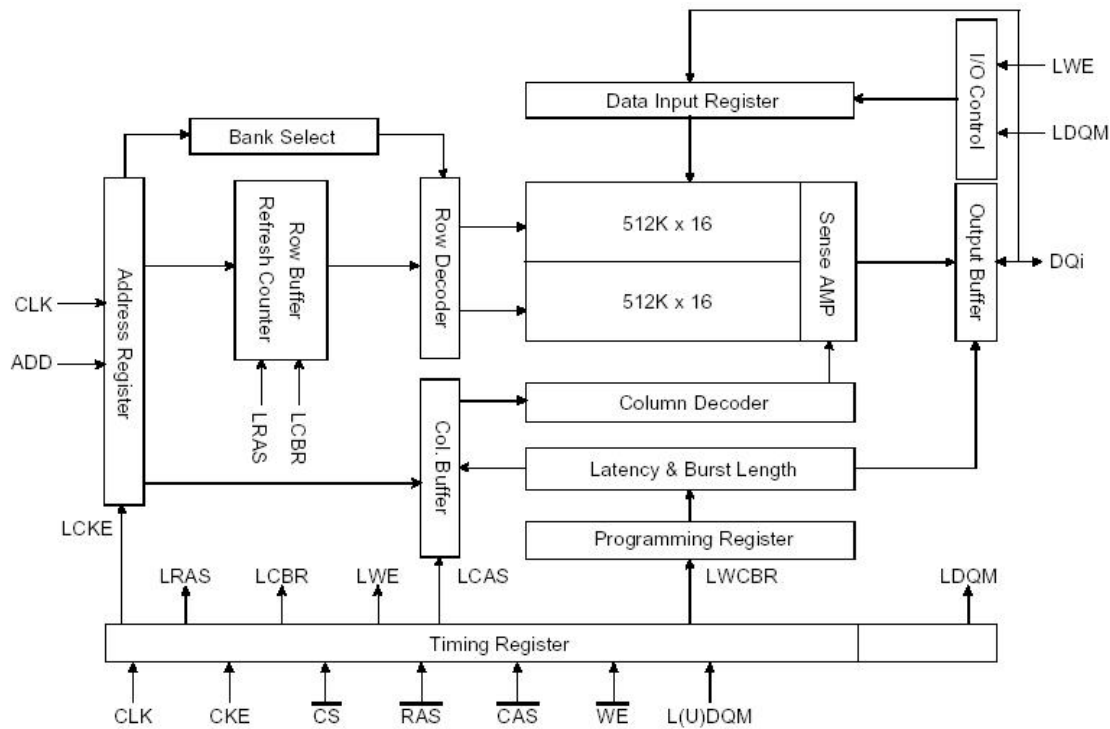
2:PACKAGE DIMENSIONS (Unit:mm)



(UNIT : mm)

■ K4S161622H (IC803) 1M x 16 SDRAM

1:BLOCK DIAGRAM



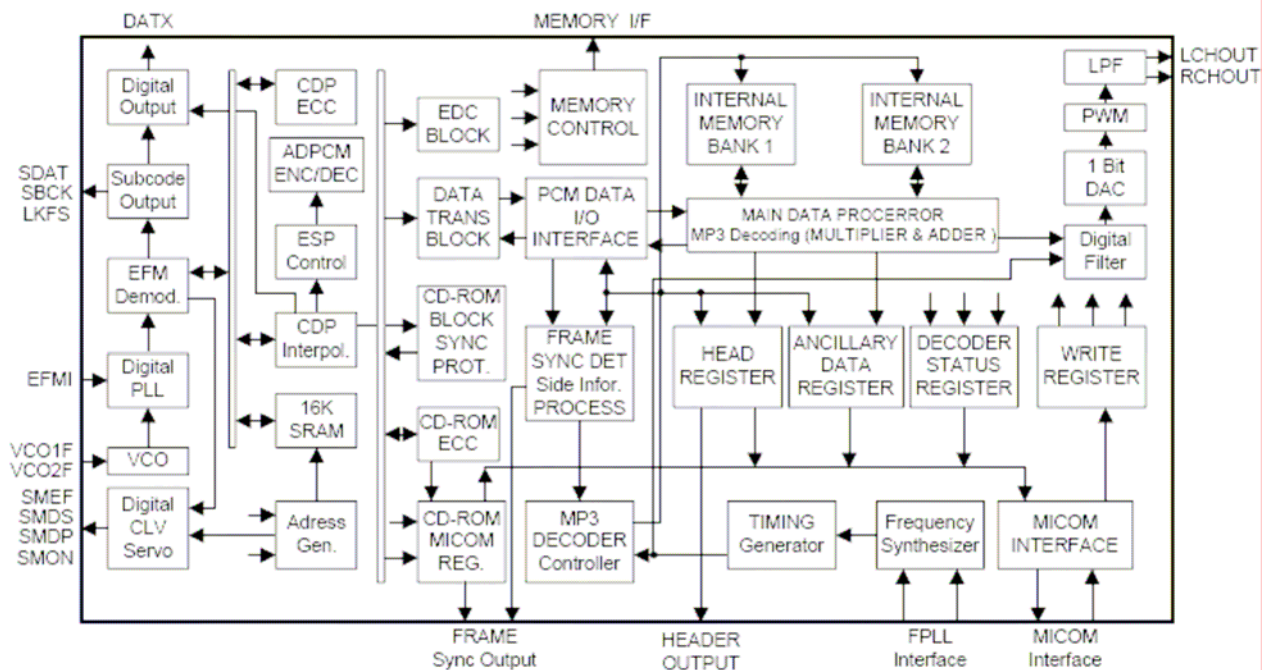
2: PIN NAME

VDD	1	50	Vss
DQ0	2	49	DQ15
DQ1	3	48	DQ14
VSSQ	4	47	VSSQ
DQ2	5	46	DQ13
DQ3	6	45	DQ12
VDDQ	7	44	VDDQ
DQ4	8	43	DQ11
DQ5	9	42	DQ10
VSSQ	10	41	VSSQ
DQ6	11	40	DQ9
DQ7	12	39	DQ8
VDDQ	13	38	VDDQ
LDQM	14	37	N.C/RFU
WE	15	36	UDQM
CAS	16	35	CLK
RAS	17	34	CKE
CS	18	33	N.C
BA	19	32	A9
A10/AP	20	31	A8
A0	21	30	A7
A1	22	29	A6
A2	23	28	A5
A3	24	27	A4
VDD	25	26	Vss

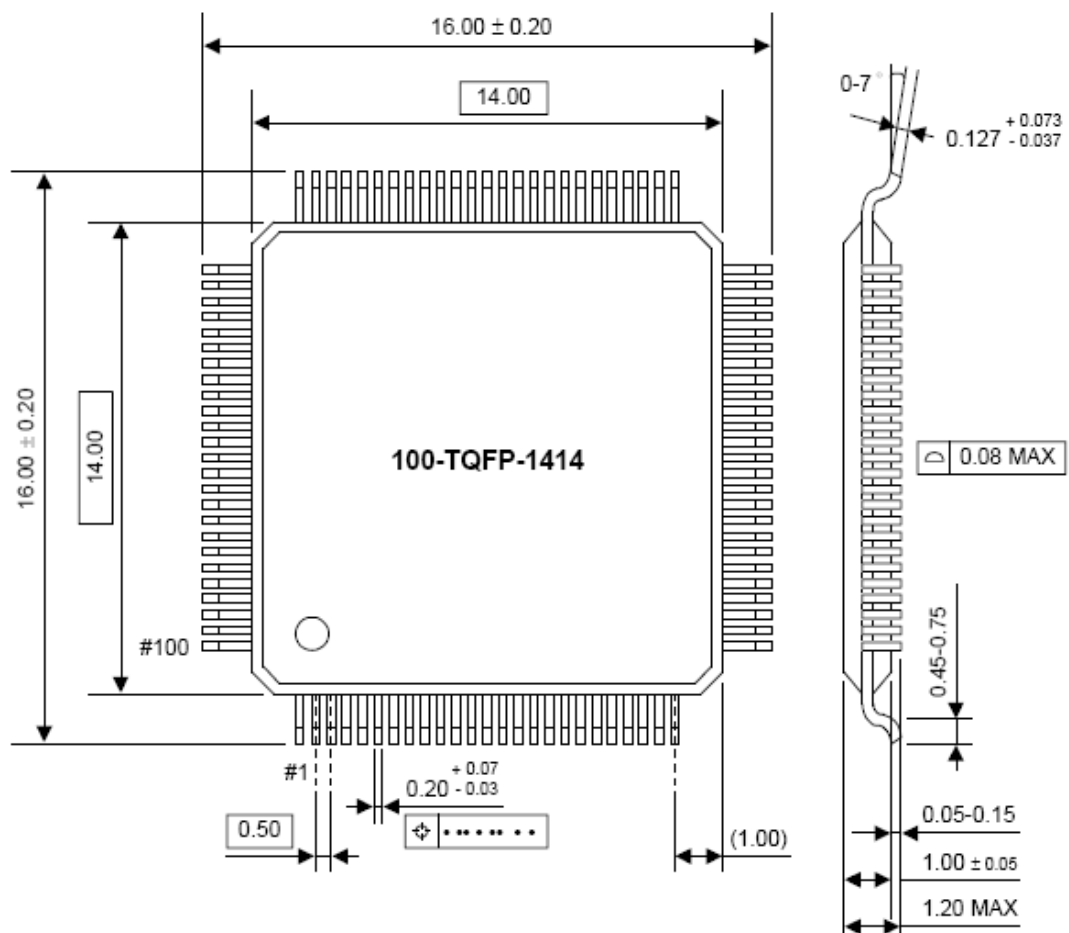
50PIN TSOP (II)  
(400mil x 825mil)  
(0.8 mm PIN PITCH)

## ■ S5L8310 (IC804) CD/MP3 DECODER IC

### 1: BLOCK DIAGRAM



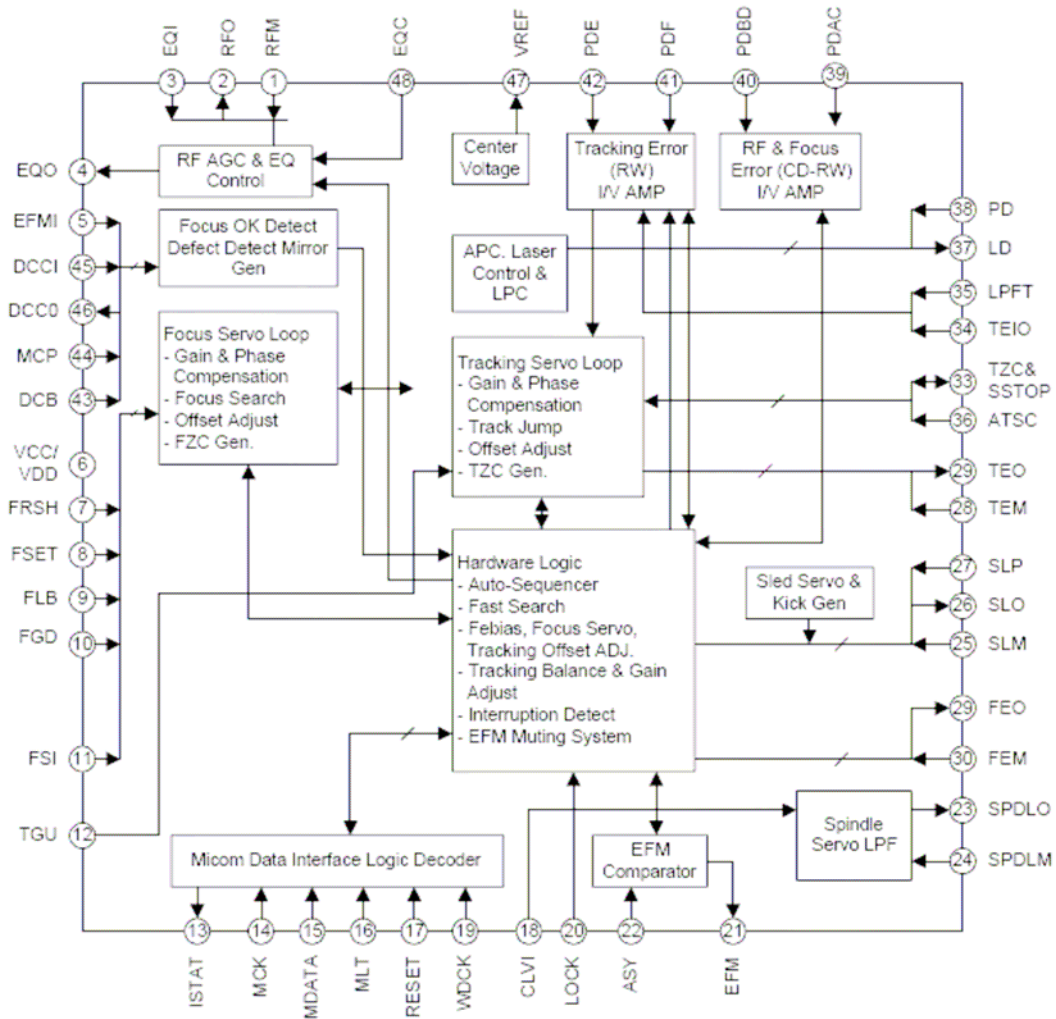
### 2: PACKAGE DIMENSIONS (Unit:mm)



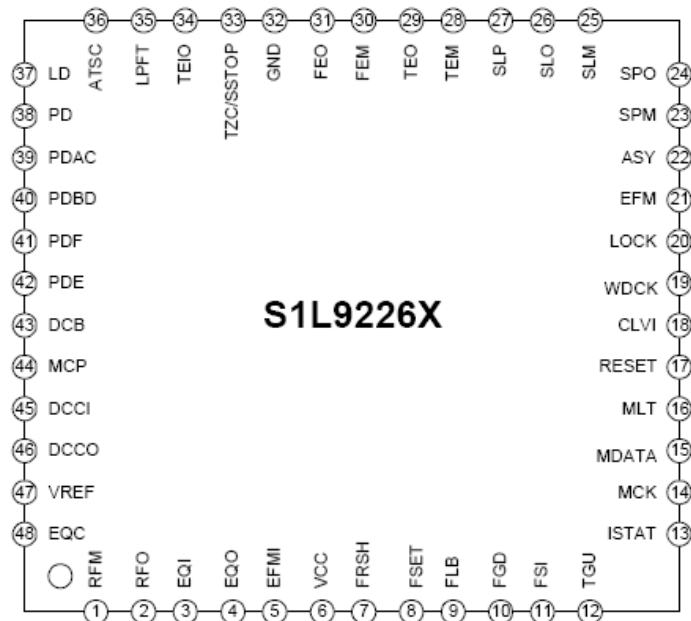


# ■ SIL9226X (IC701) RF AMP & SERVO SIGNAL PROCESSOR

## 1:BLOCK DIAGRAM



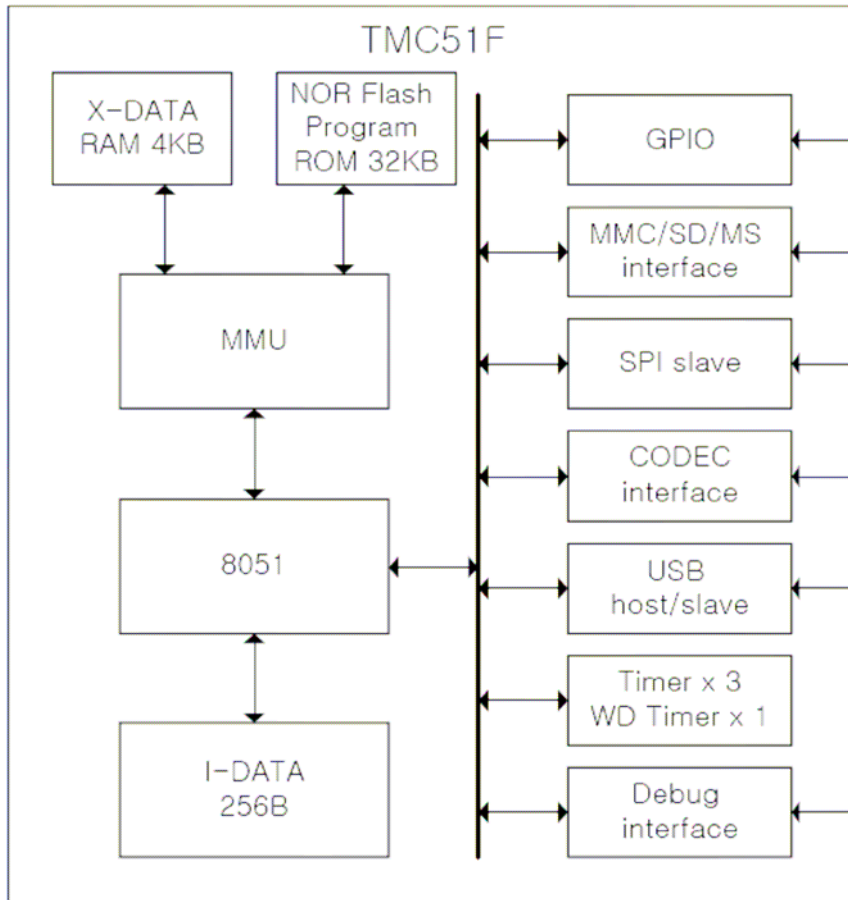
## 2: PIN NAME



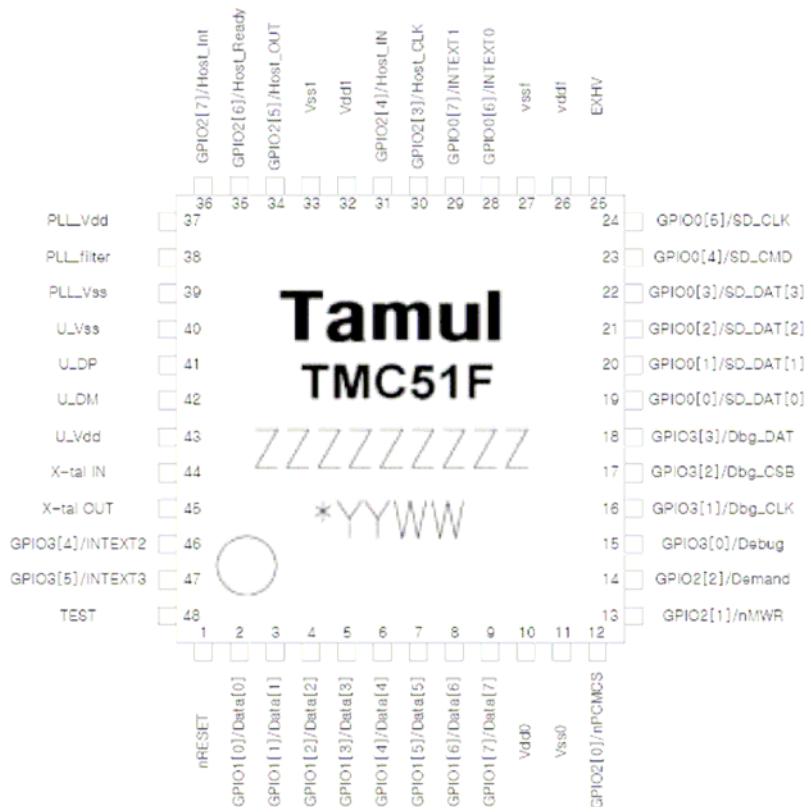


## ■ TMC51F01M (UM1) USB HOST IC

### 1:BLOCK DIAGRAM

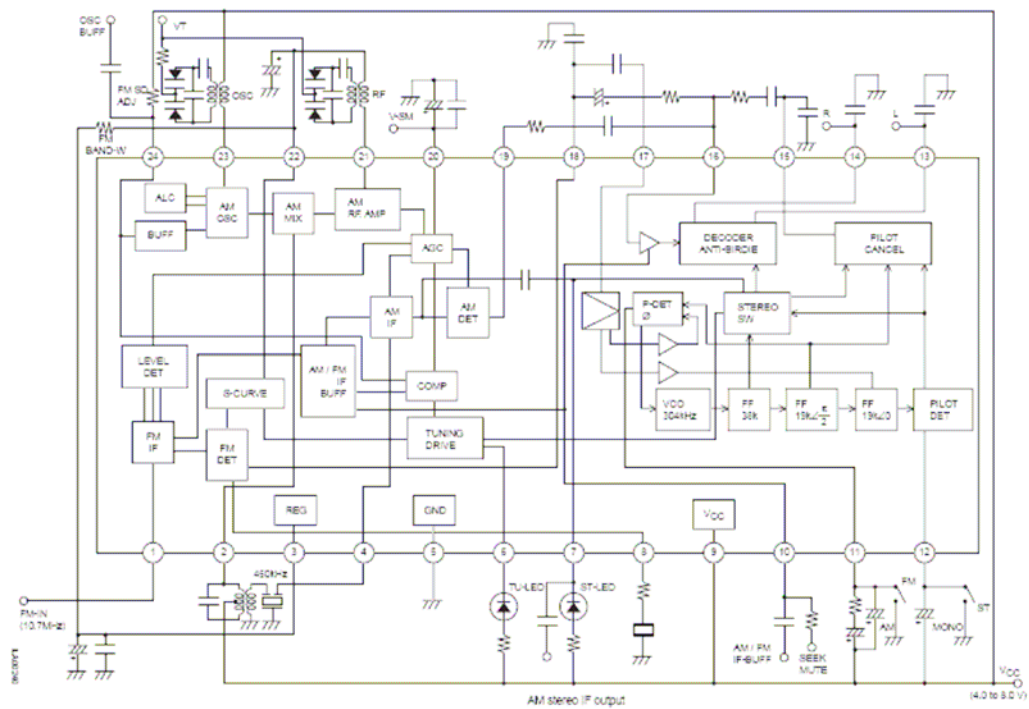


### 2: PIN NAME

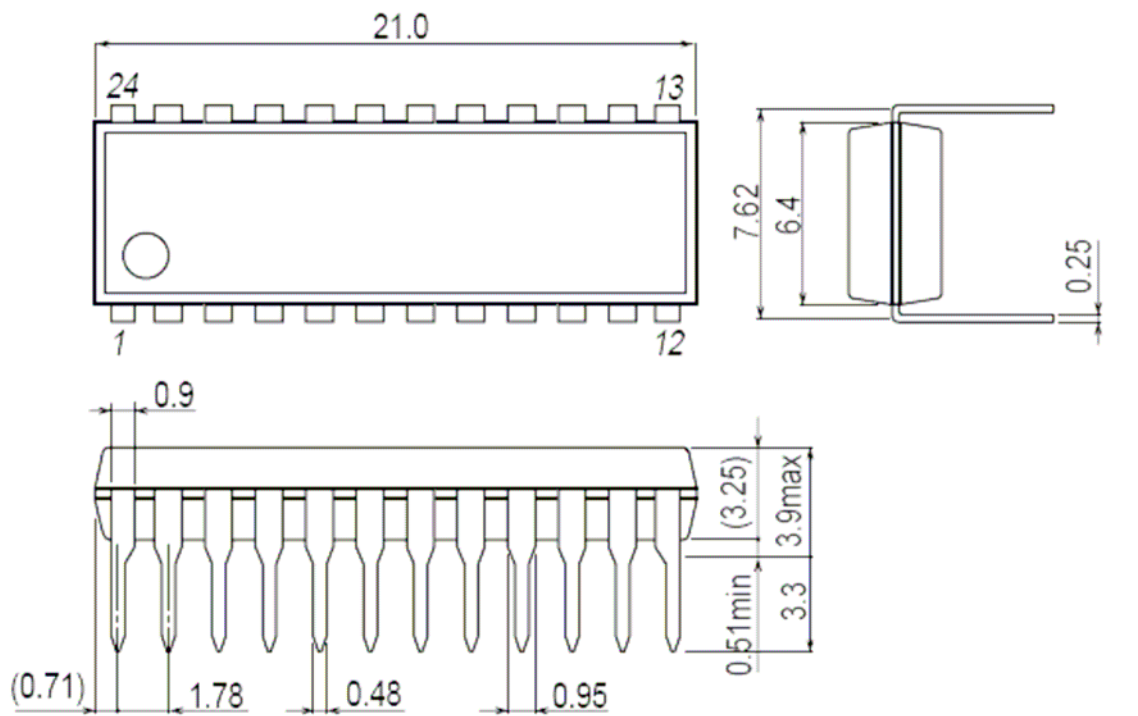


■ LA1833N (IC1) System-on-Chip Tuner IC

1: PIN NAME



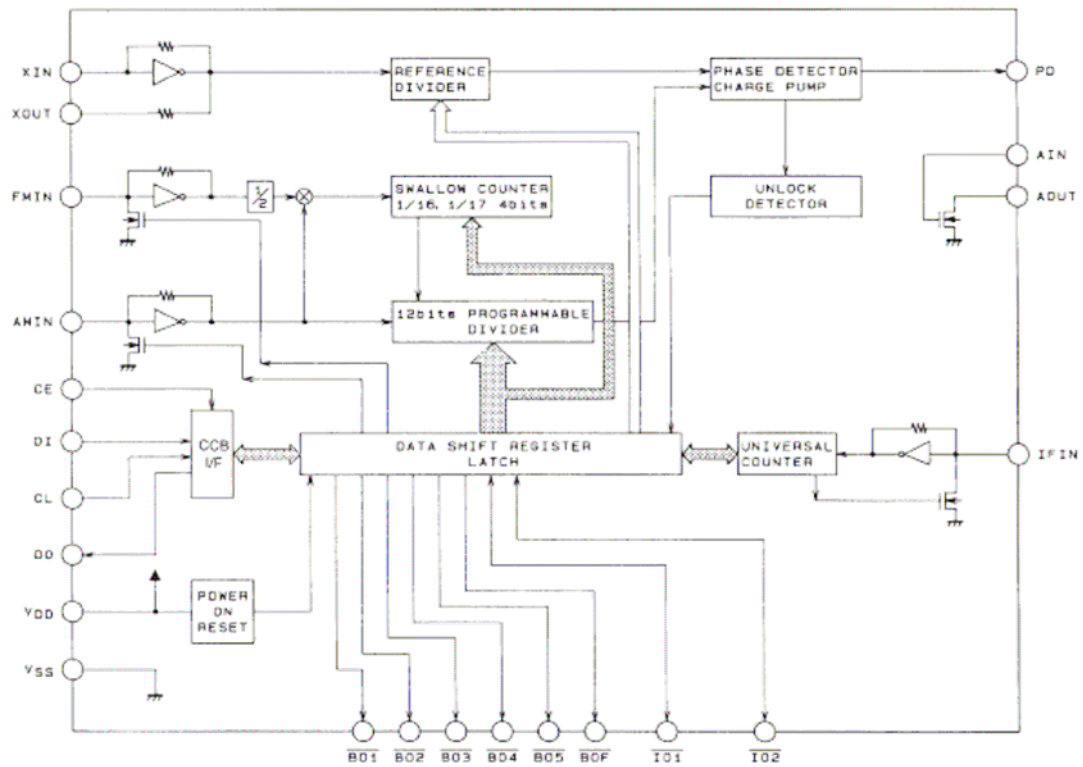
## 2:PACKAGE DIMENSIONS (Unit:mm)



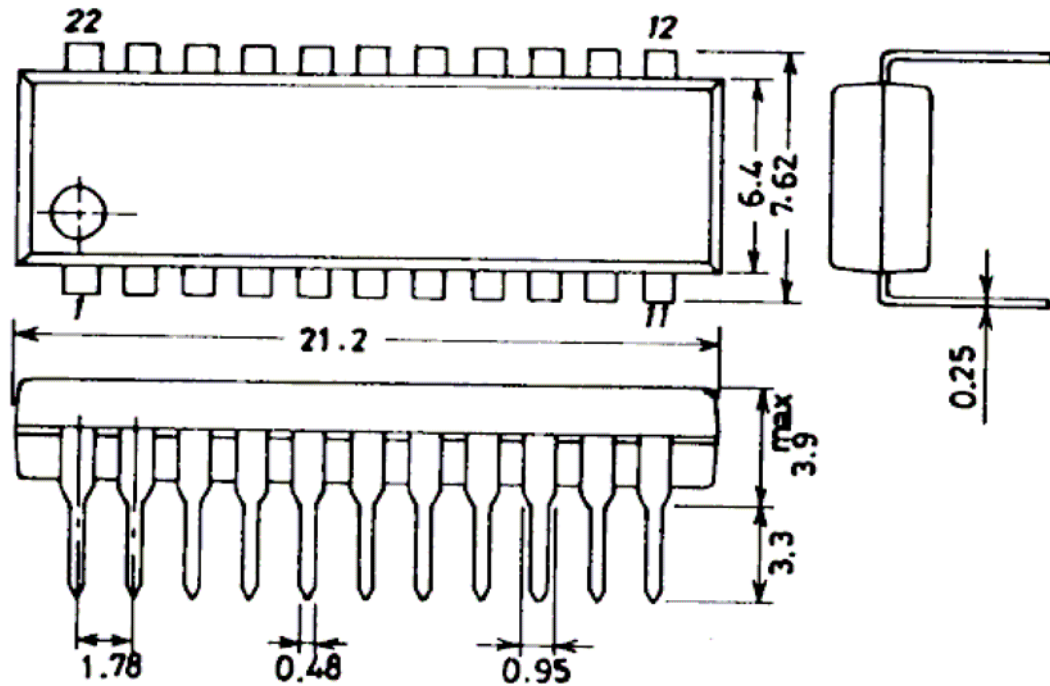
SANYO: DIP24S (300 mil)

## ■ LC72136N (IC4) PLL FOR TUNER

### 1:BLOCK DIAGRAM

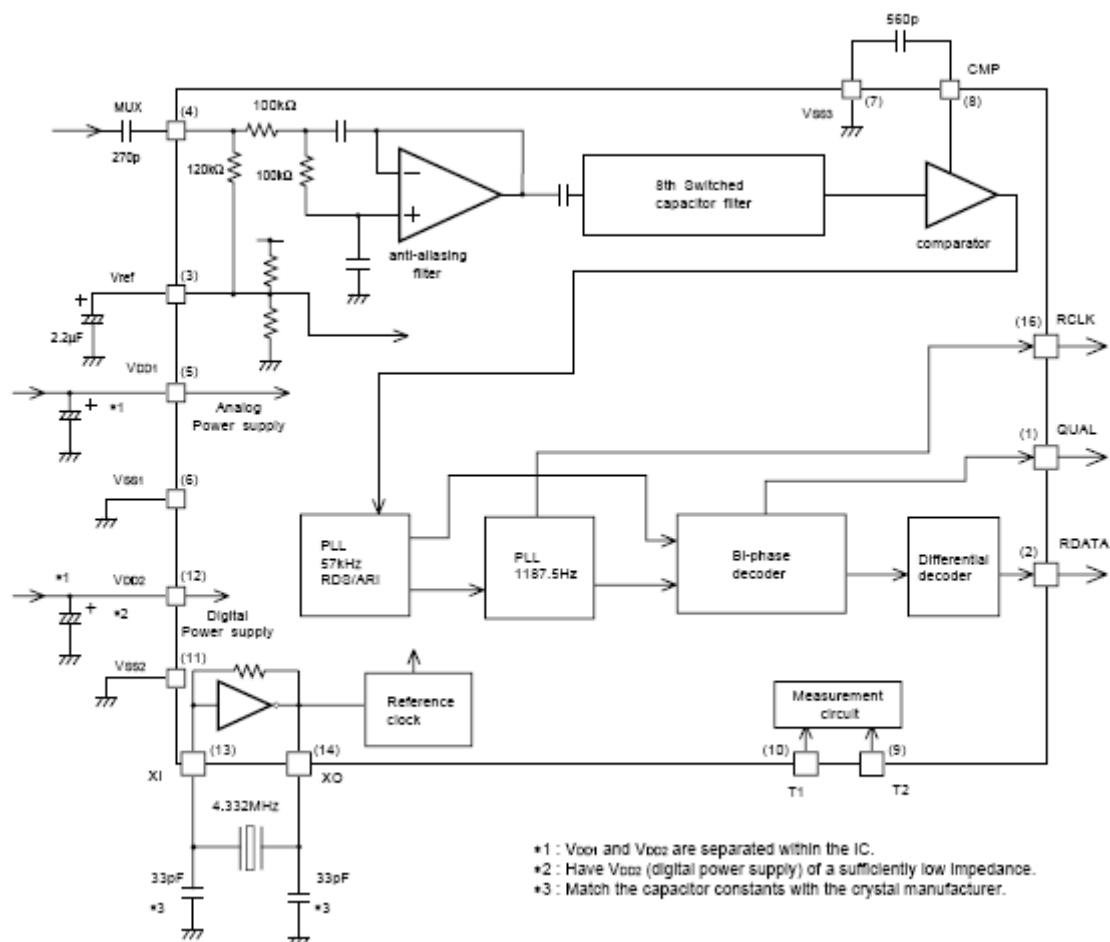


### 2:PACKAGE DIMENSIONS (Unit:mm)

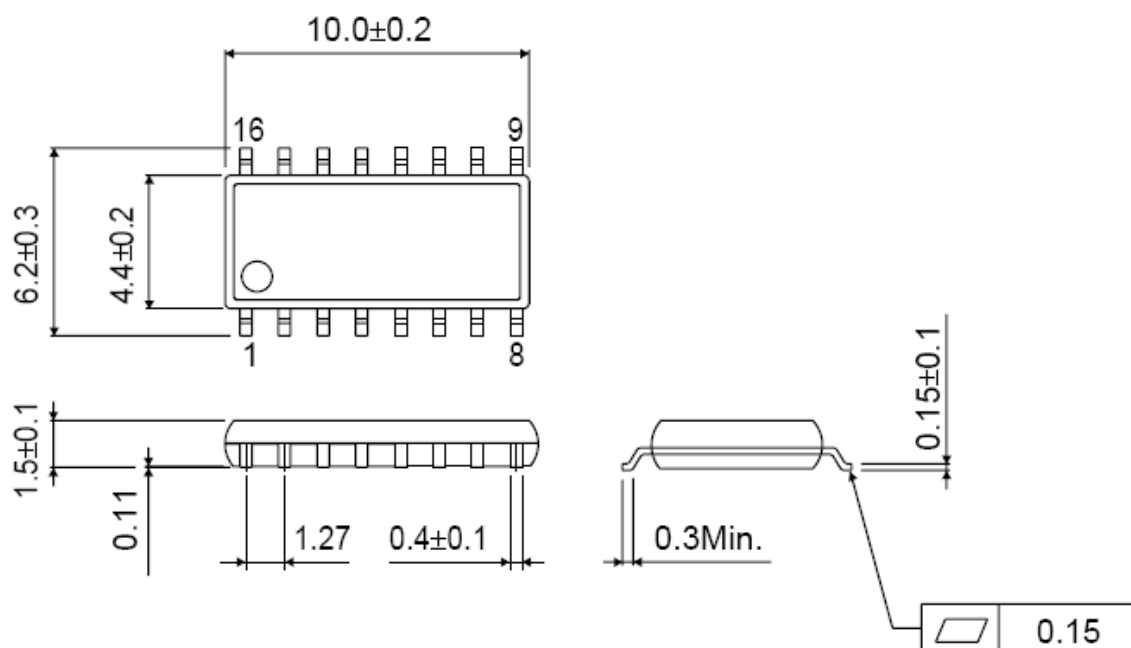


## ■ BU1924F (IC3) RDS IC

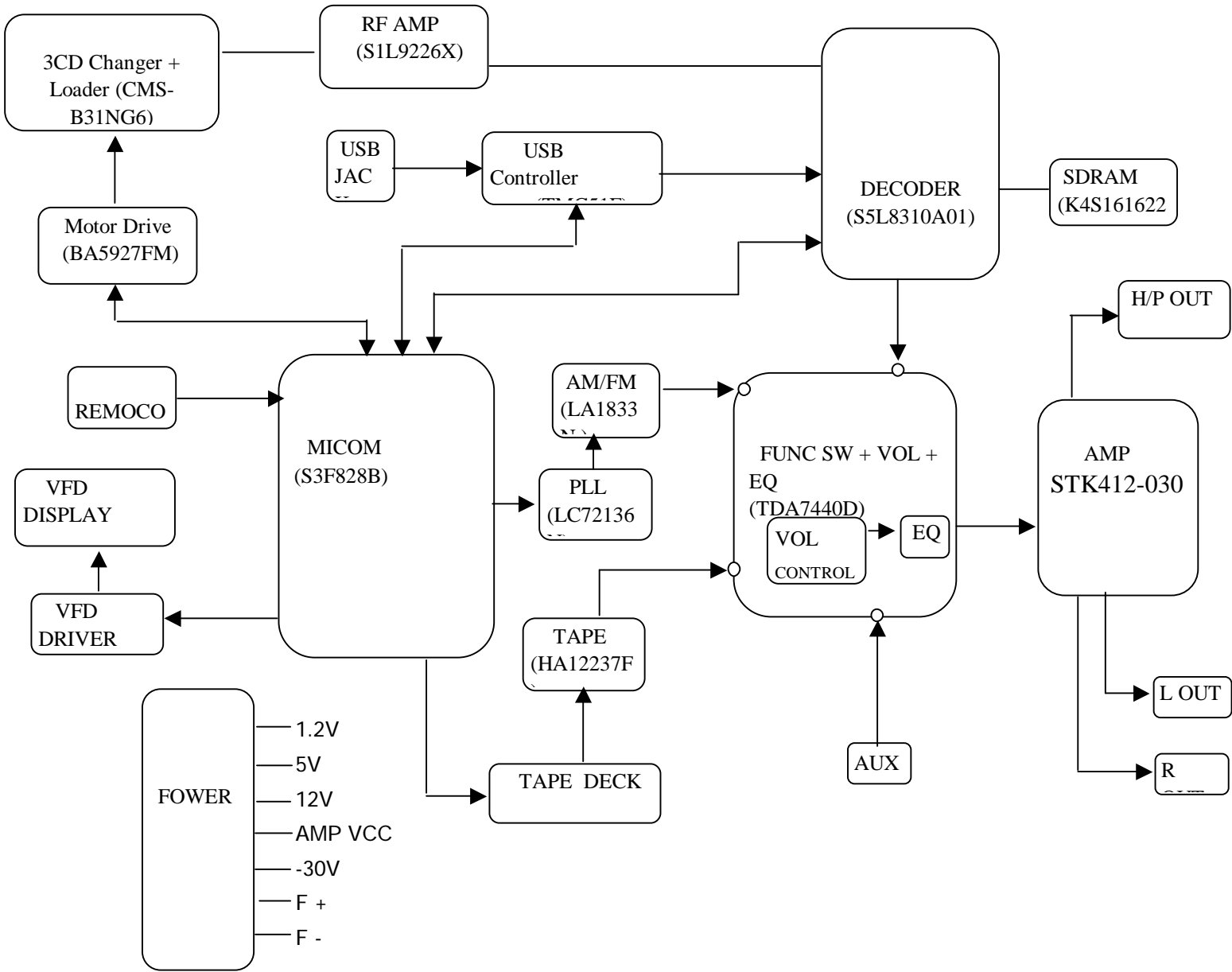
### 1:BLOCK DIAGRAM



### 2:PACKAGE DIMENSIONS (Unit:mm)

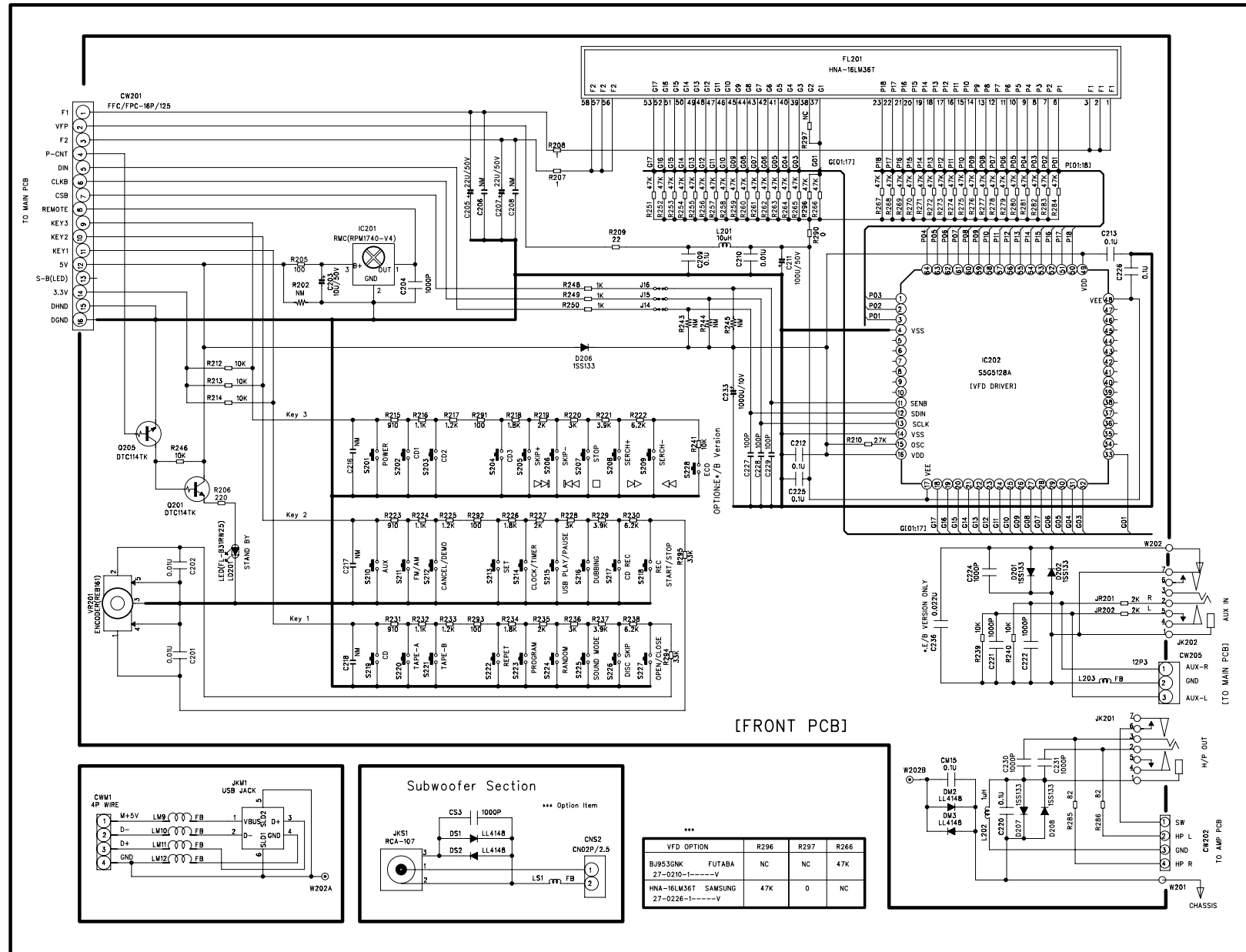


Block Diagram



# FRONT BOARD SECTION

## Schematic Diagram



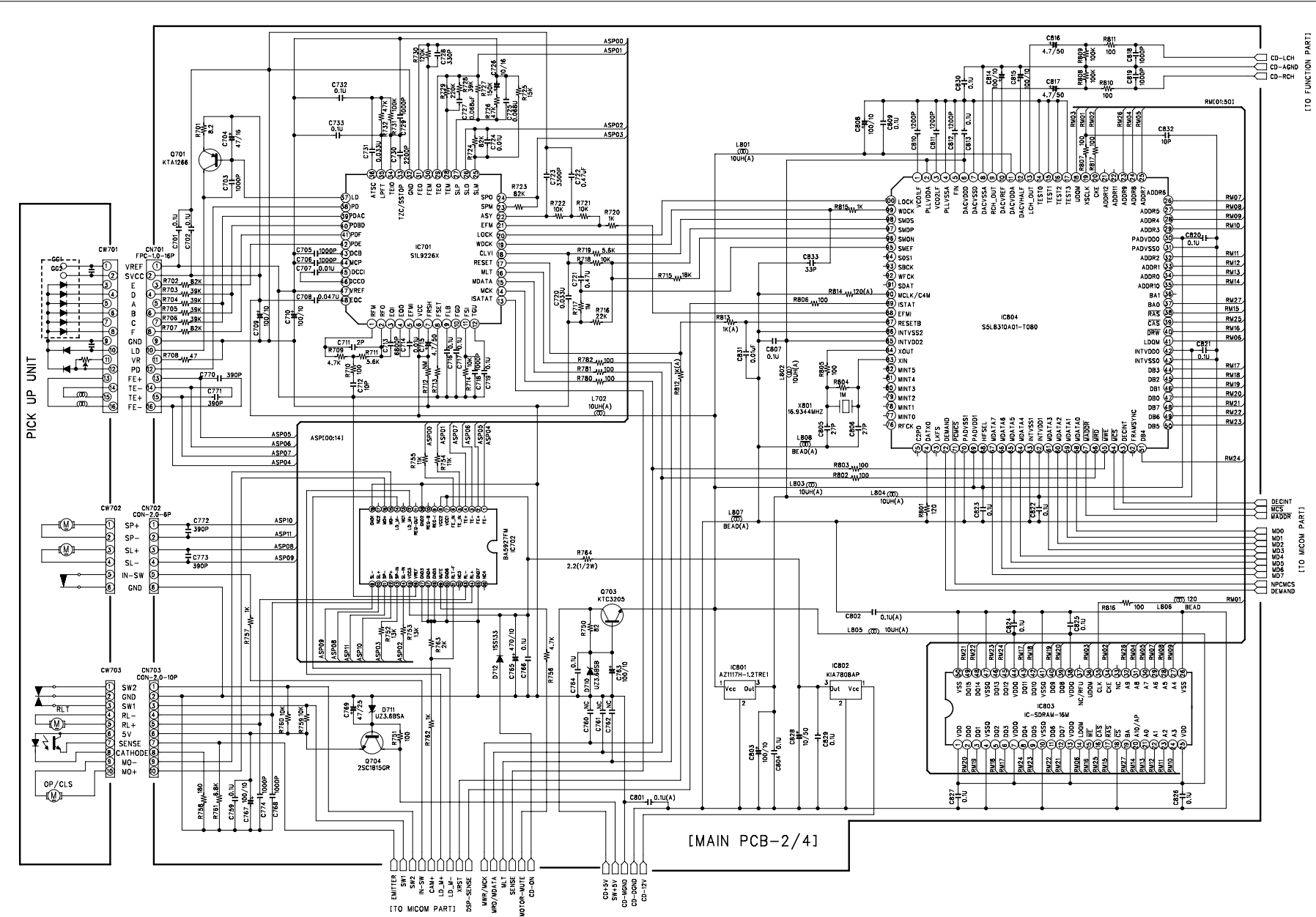
### Schematic Diagram





## MAIN BOARD SECTION

### Schematic Diagram

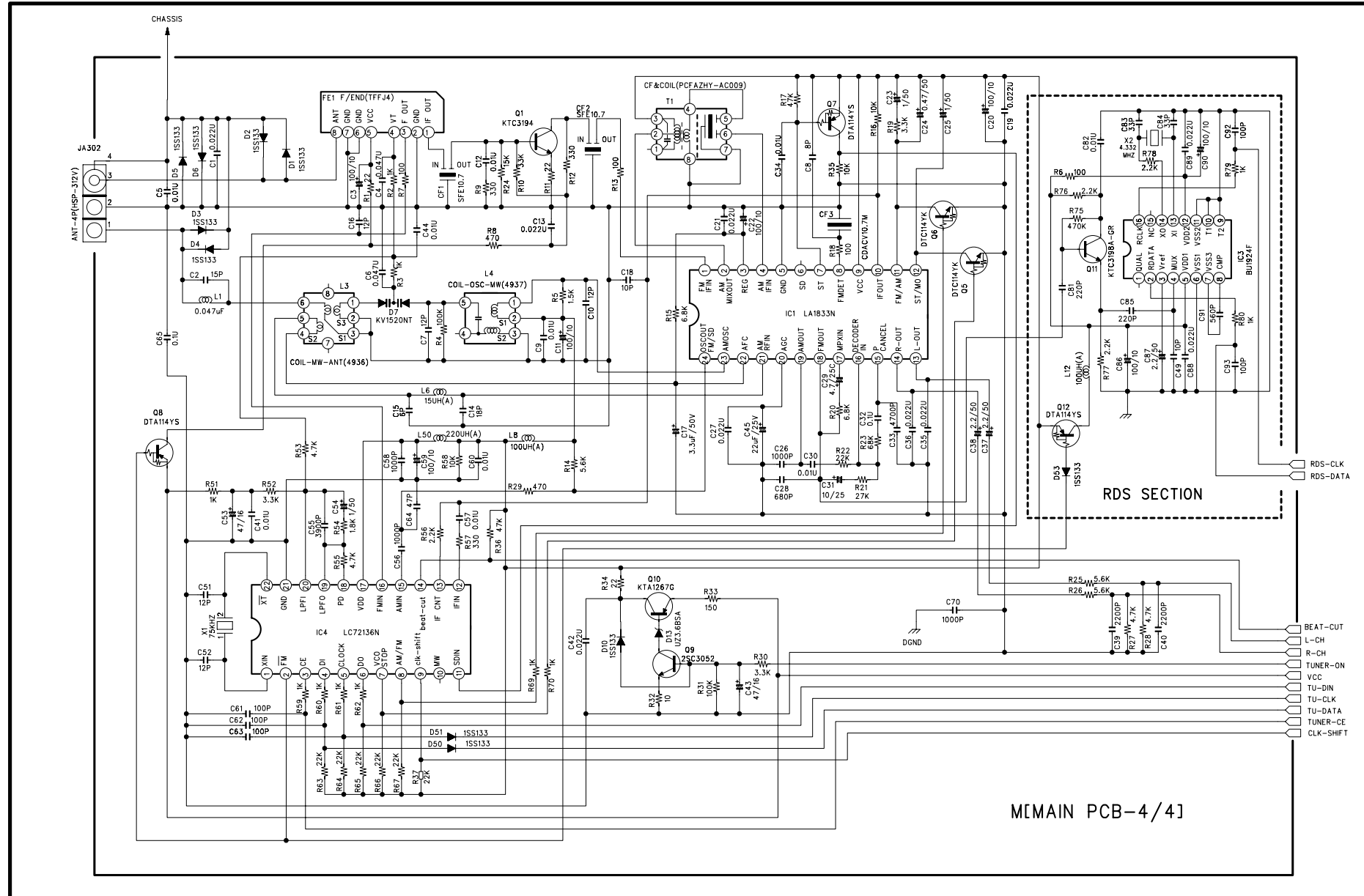


### Schematic Diagram

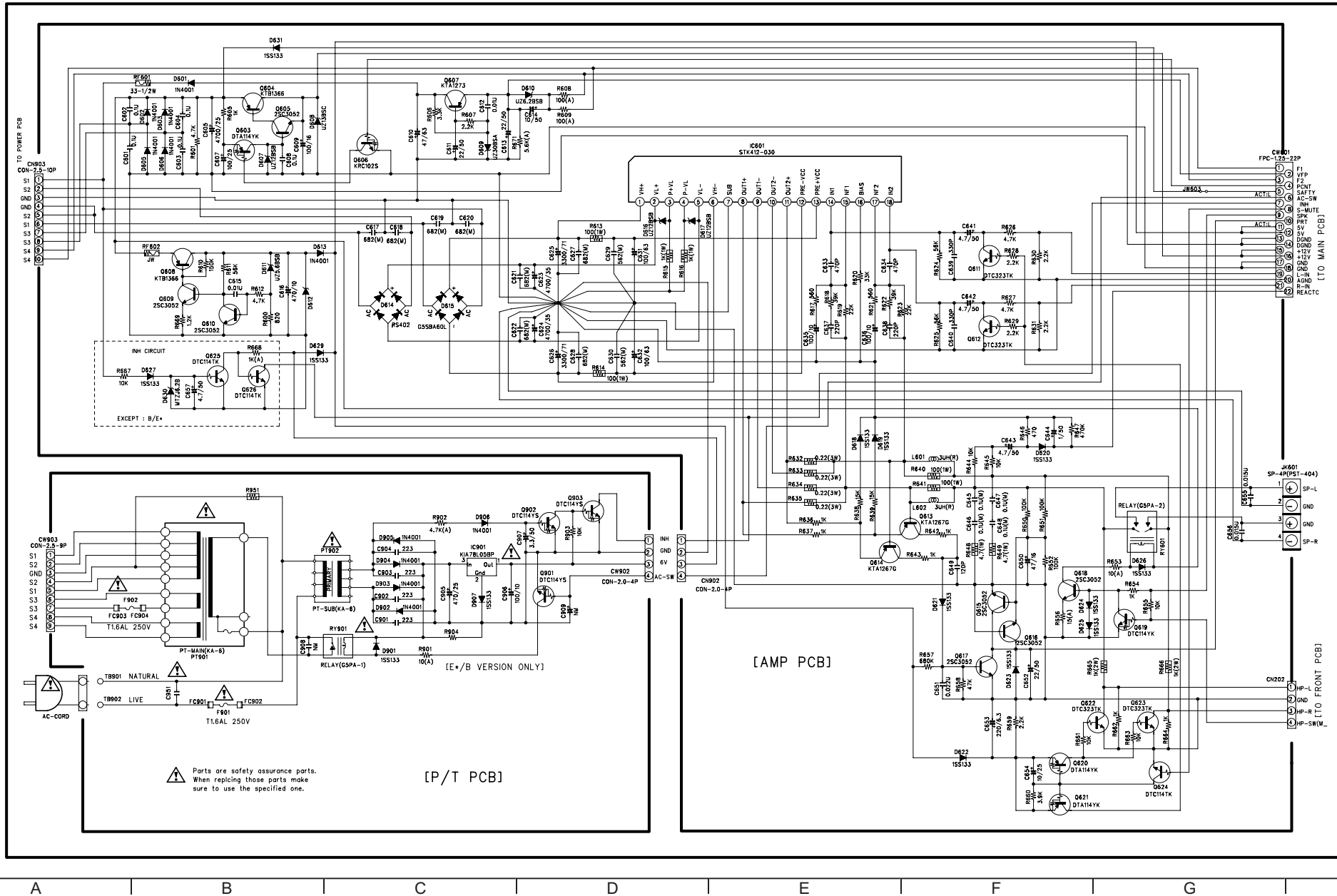


# MAIN BOARD SECTION

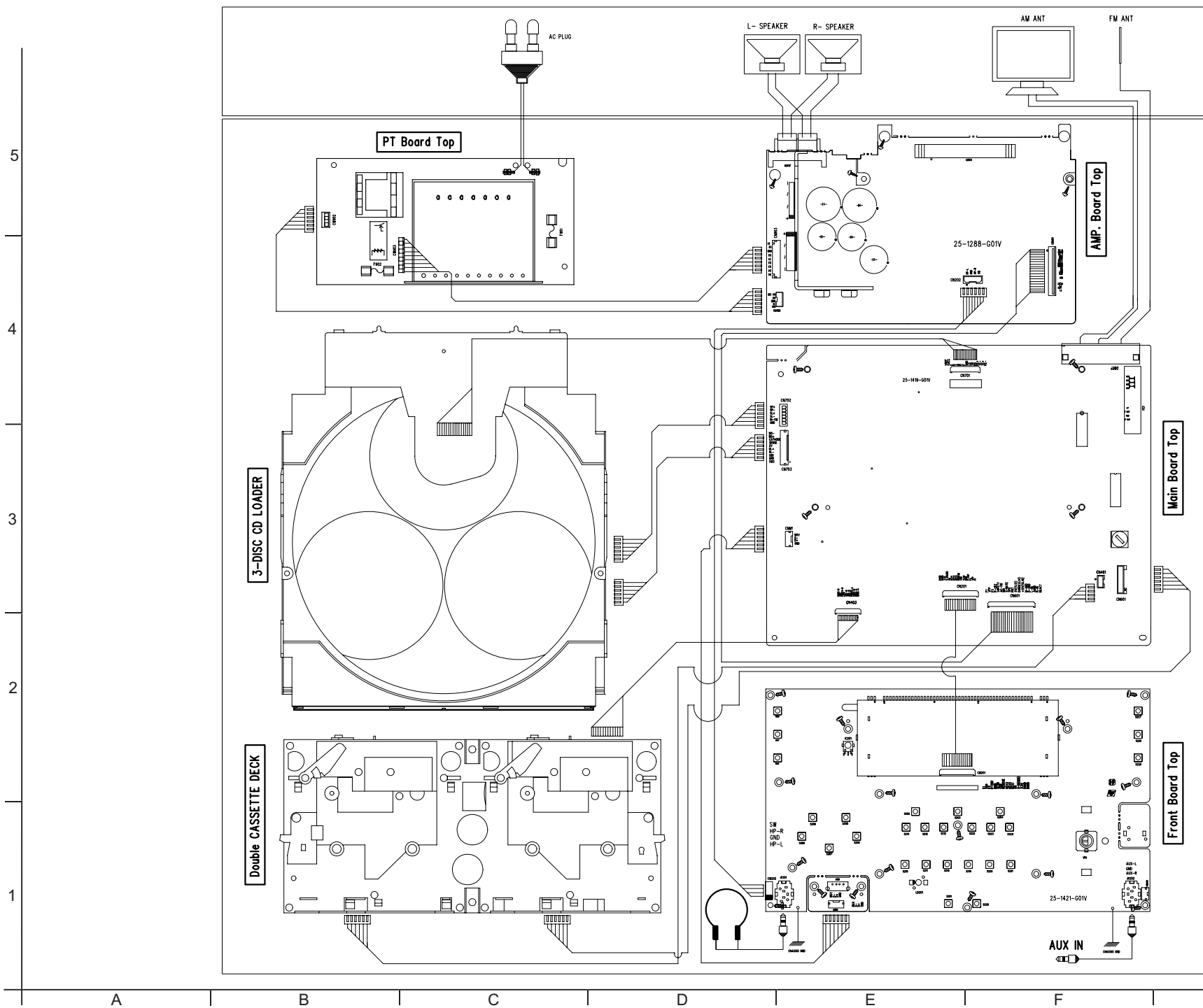
## Schematic Diagram



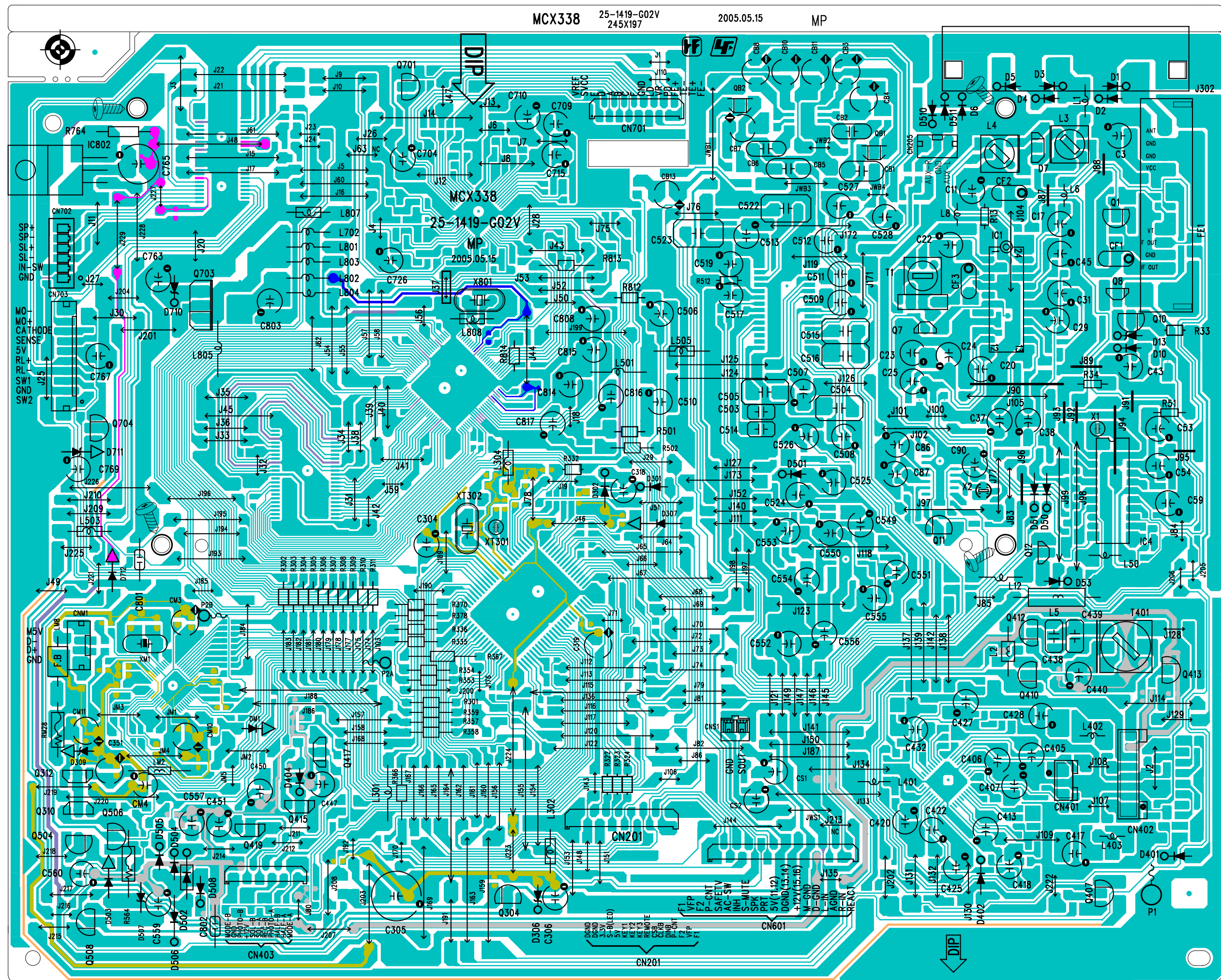
# AMP&PT BOARD SECTION Schematic Diagram



# ■ Writing Diagram









5

4

3

2

1

A

B

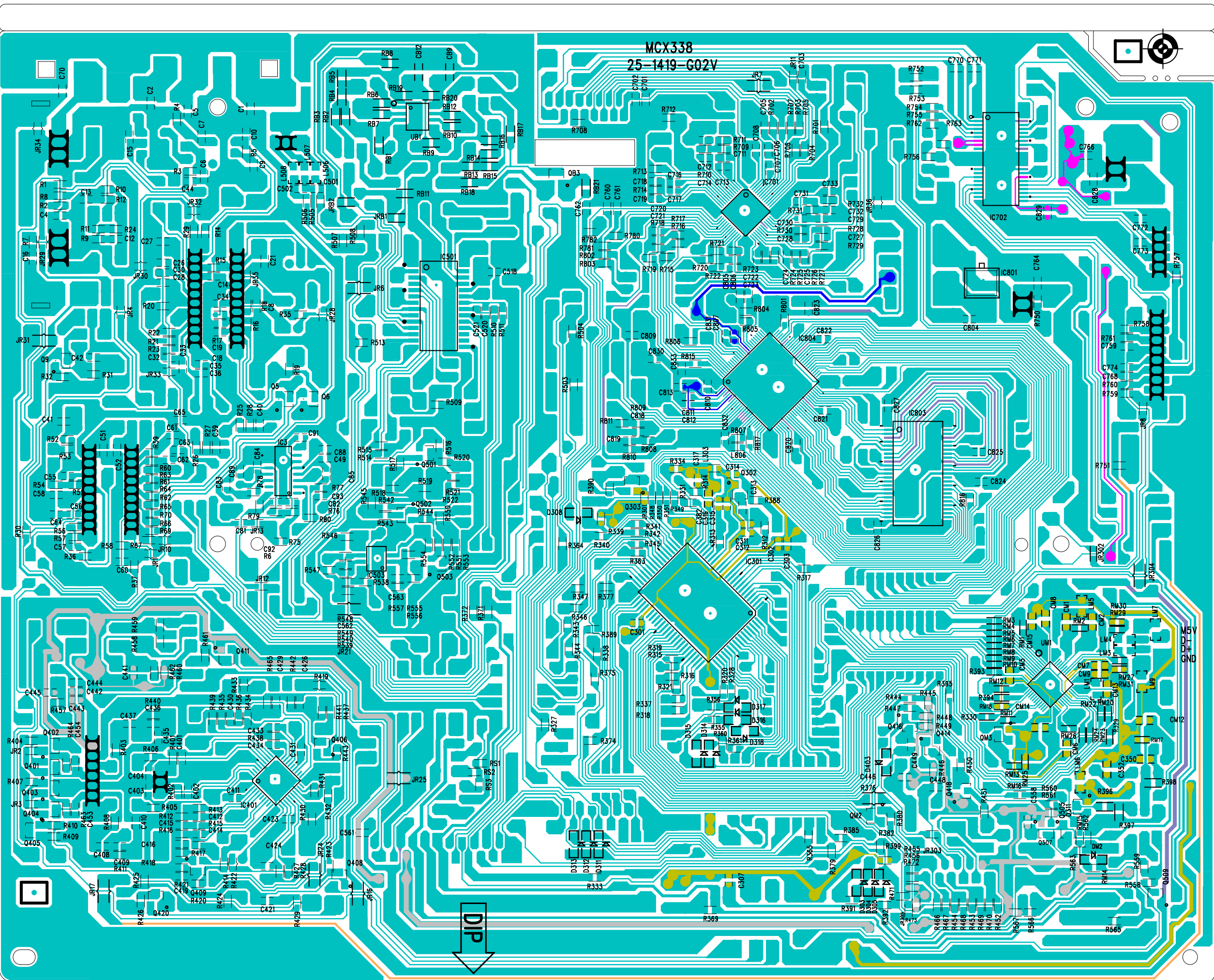
C

D

E

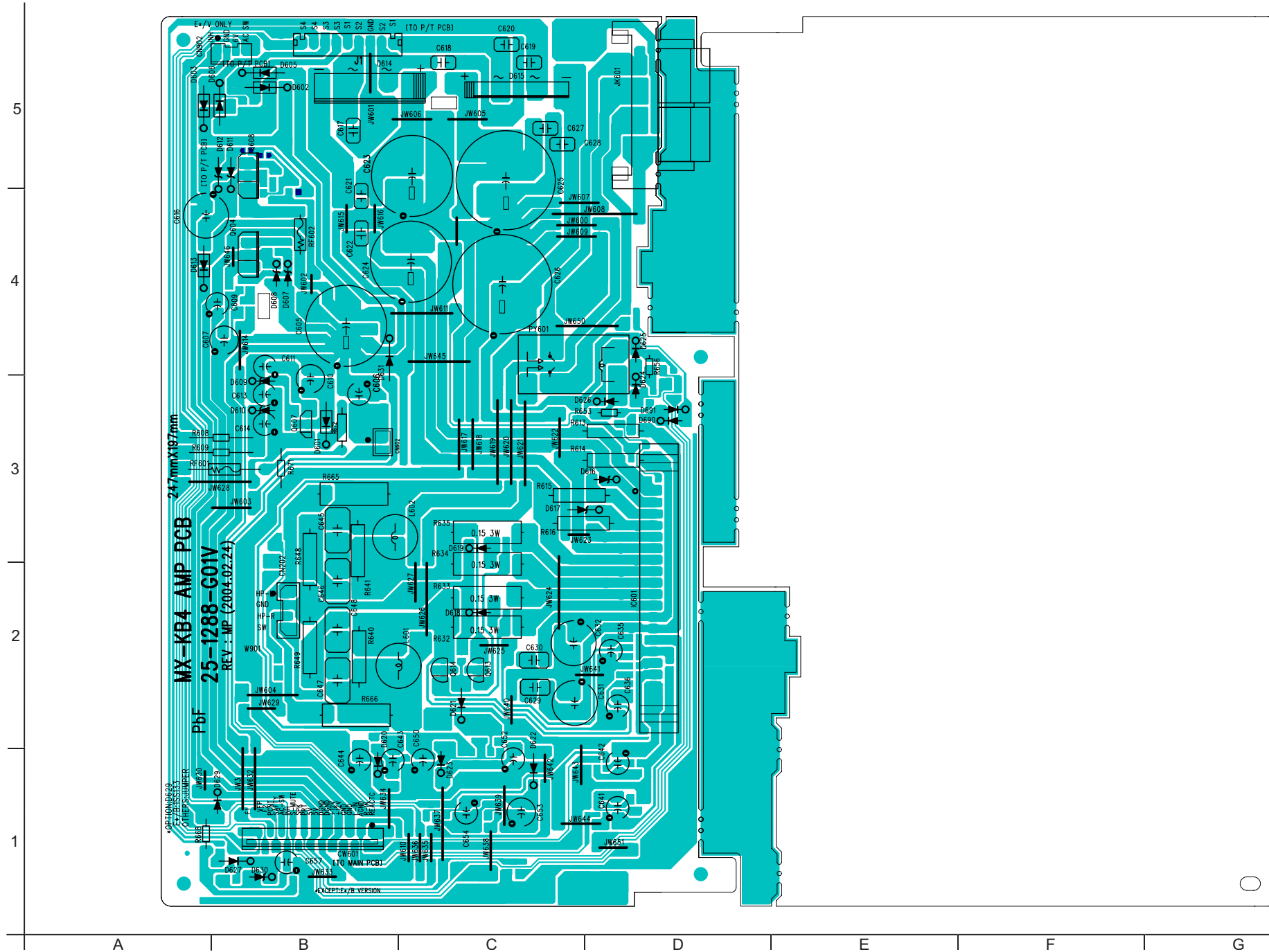
F

G



\*\*\*\*  
LM77: 26BK2125H-A000V0  
LM374: 26BLM21B-A000-0

**AMP PCB**



AMP PCB

5

4

3

2

1

A

B

C

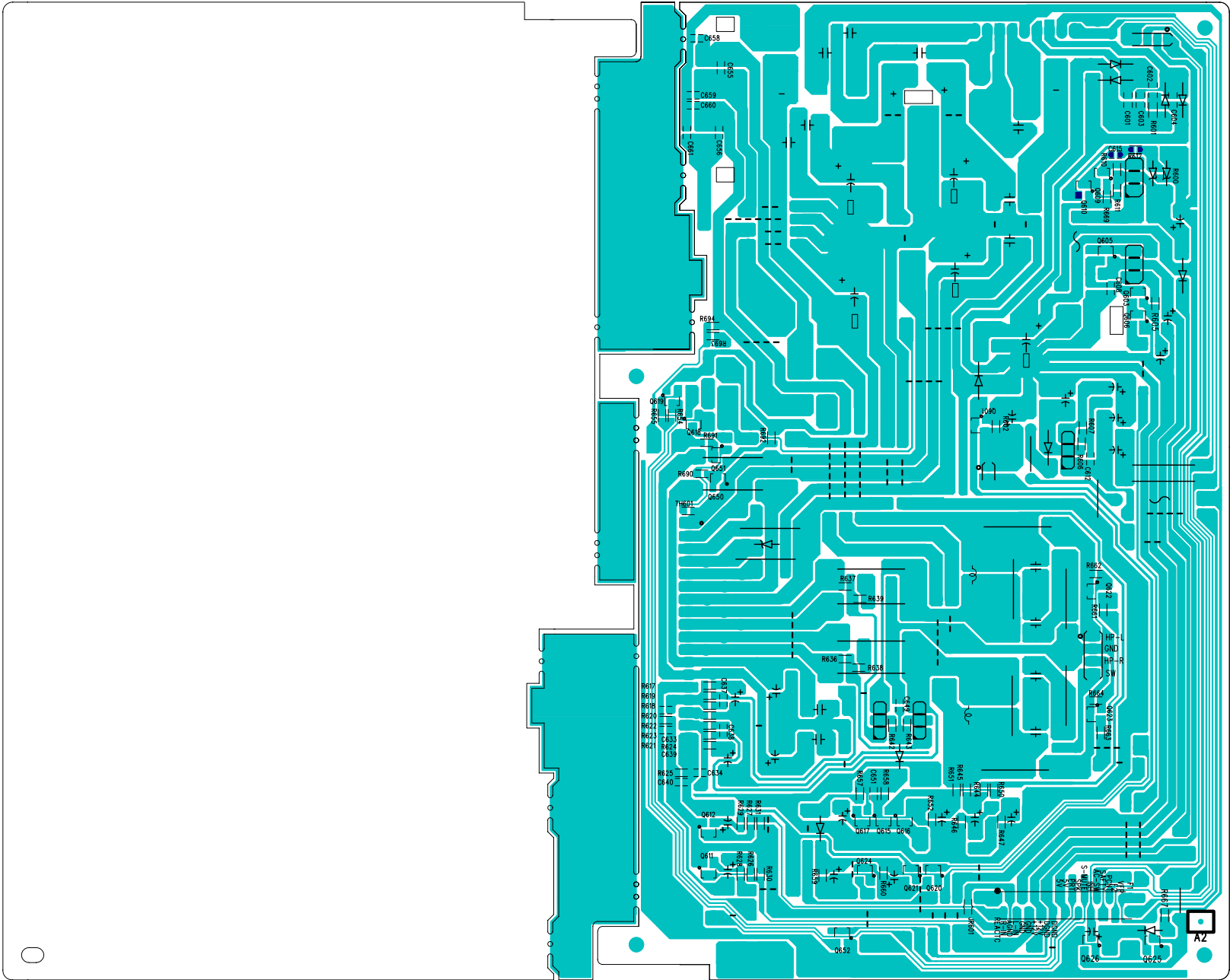
D

E

F

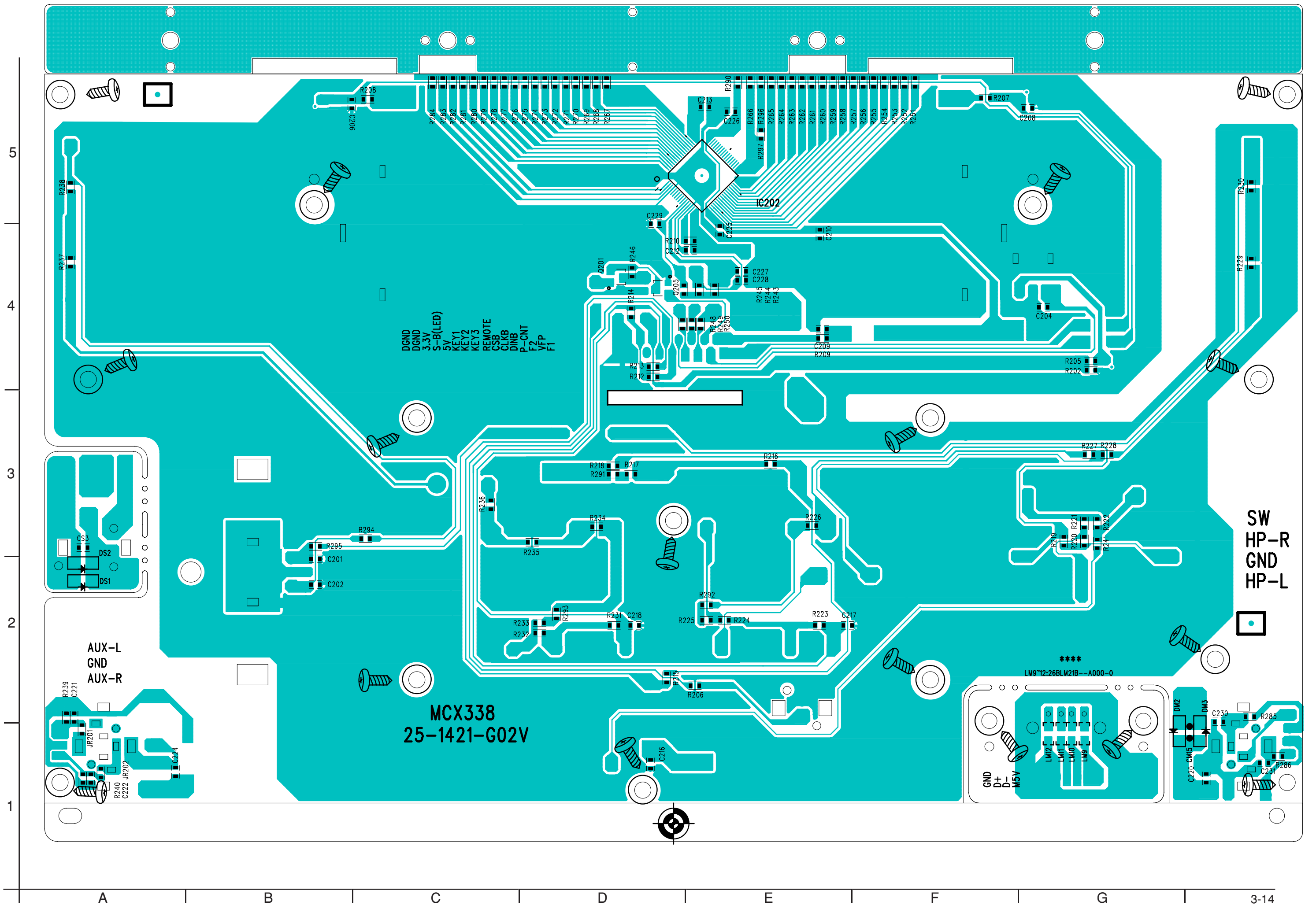
G

3-12









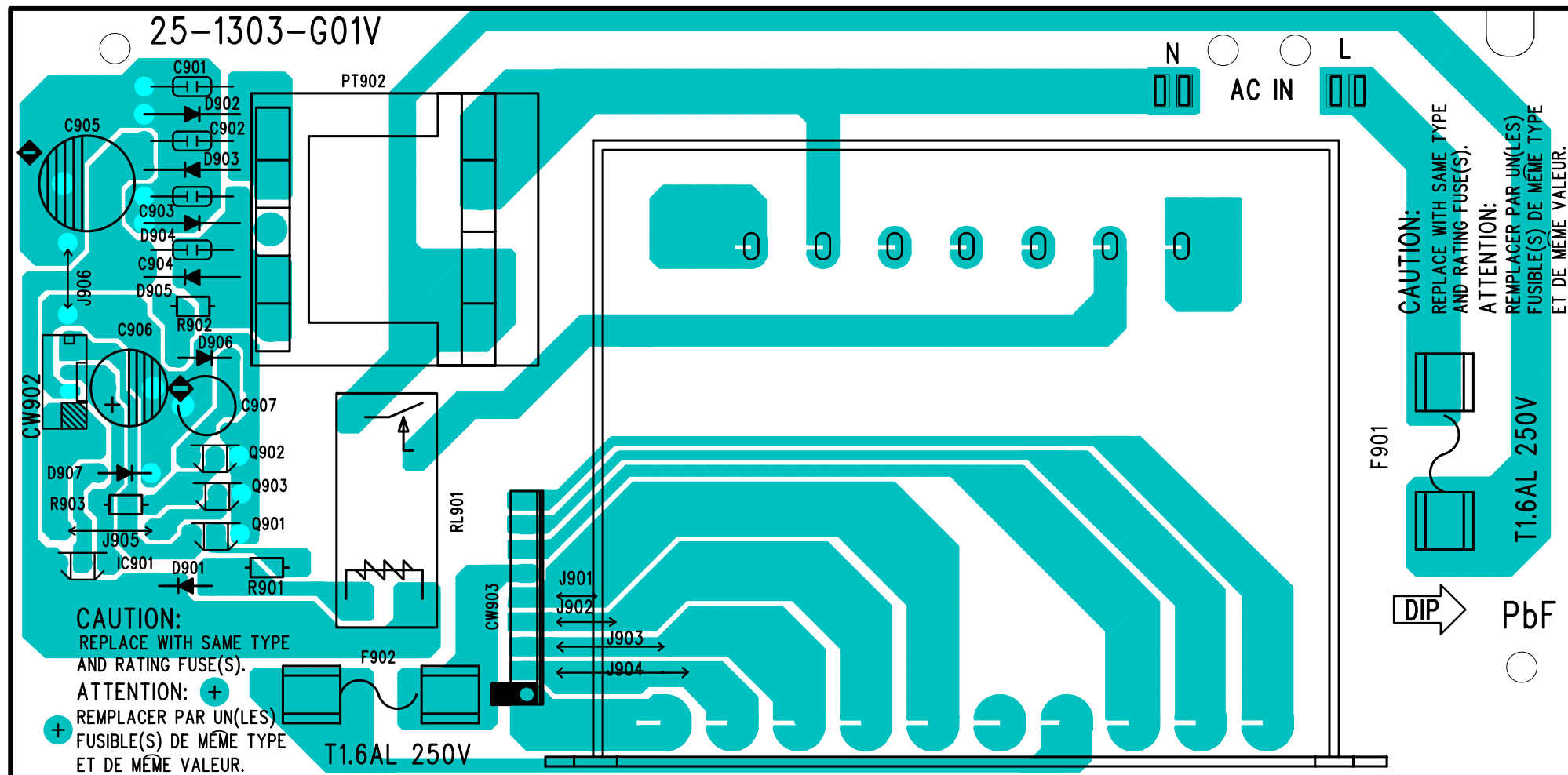
5

4

3

2

1



A

B

C

D

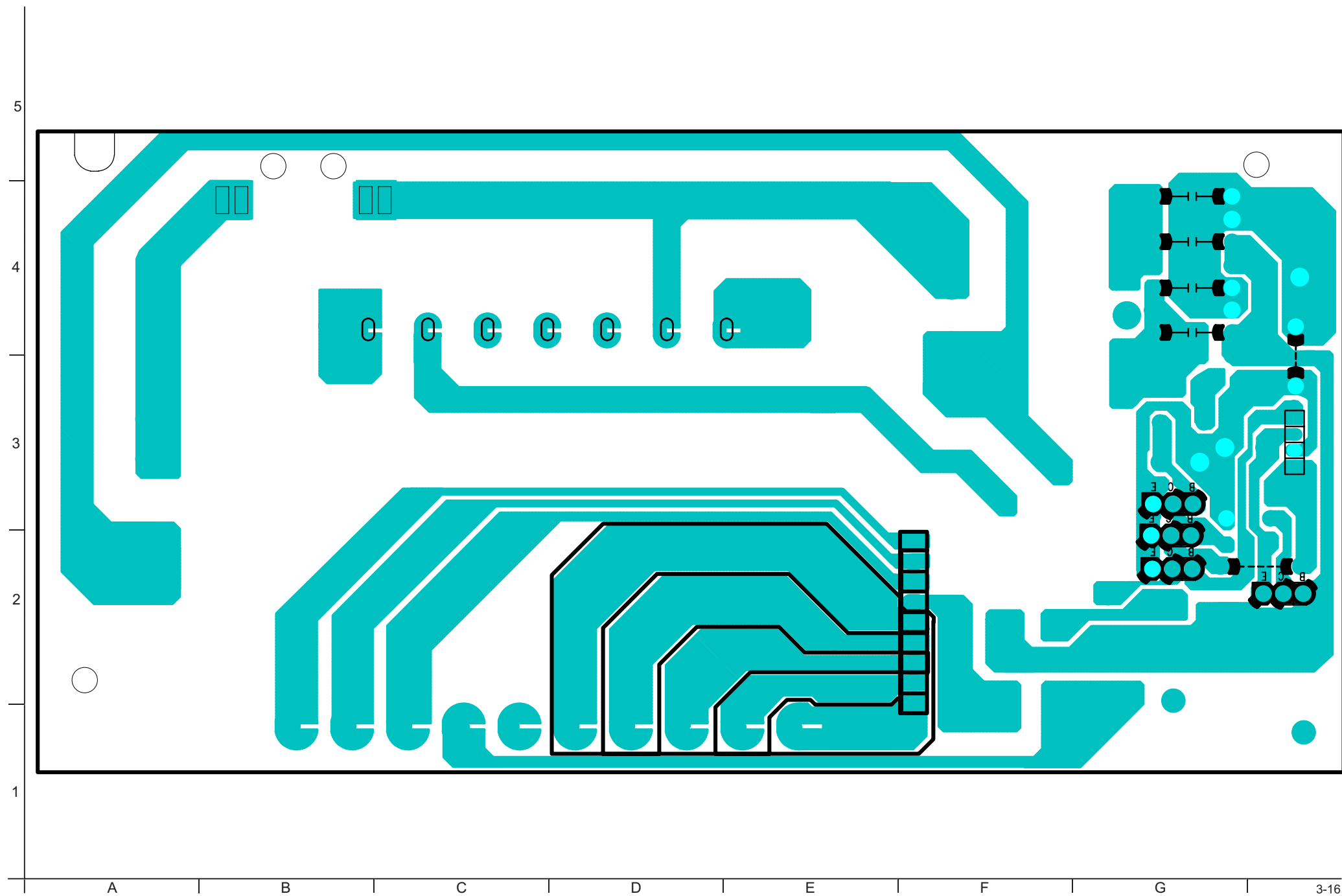
E

F

G

3-15





# PARTS LIST

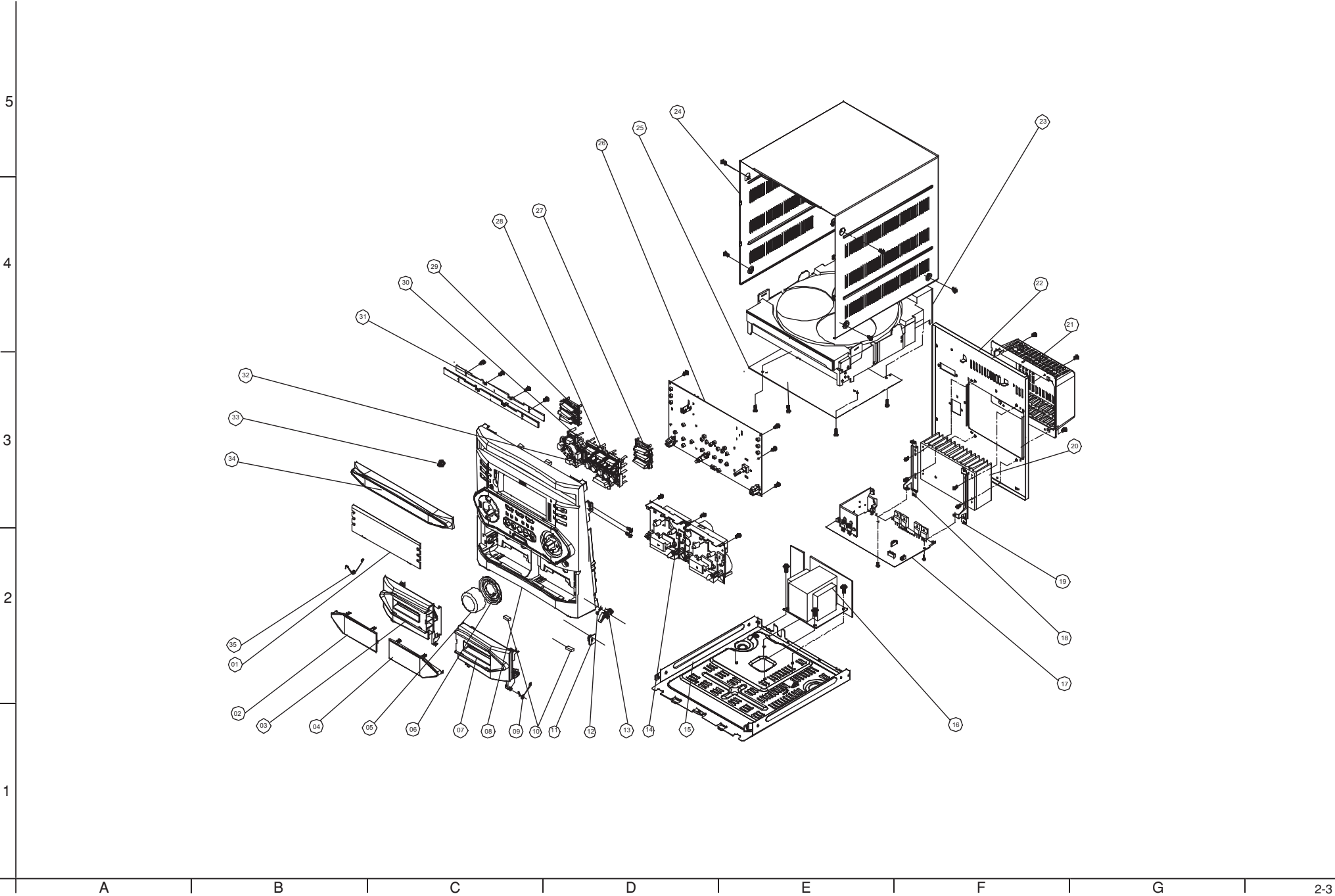
\* All printed circuit boards and its assemblies are not available as service parts.

## - Contents -



Exploded view of general assembly and parts list .....	2 - 3
CD changer mechanism assembly and parts list .....	2 - 5
Cassette mechanism assembly and parts list .....	2 - 7
Electrical parts list (Block No. 01~05) .....	2 - 9
Packing materials and accessories parts list .....	2-27

<MEMO>


■ Exploded view of general assembly and parts list



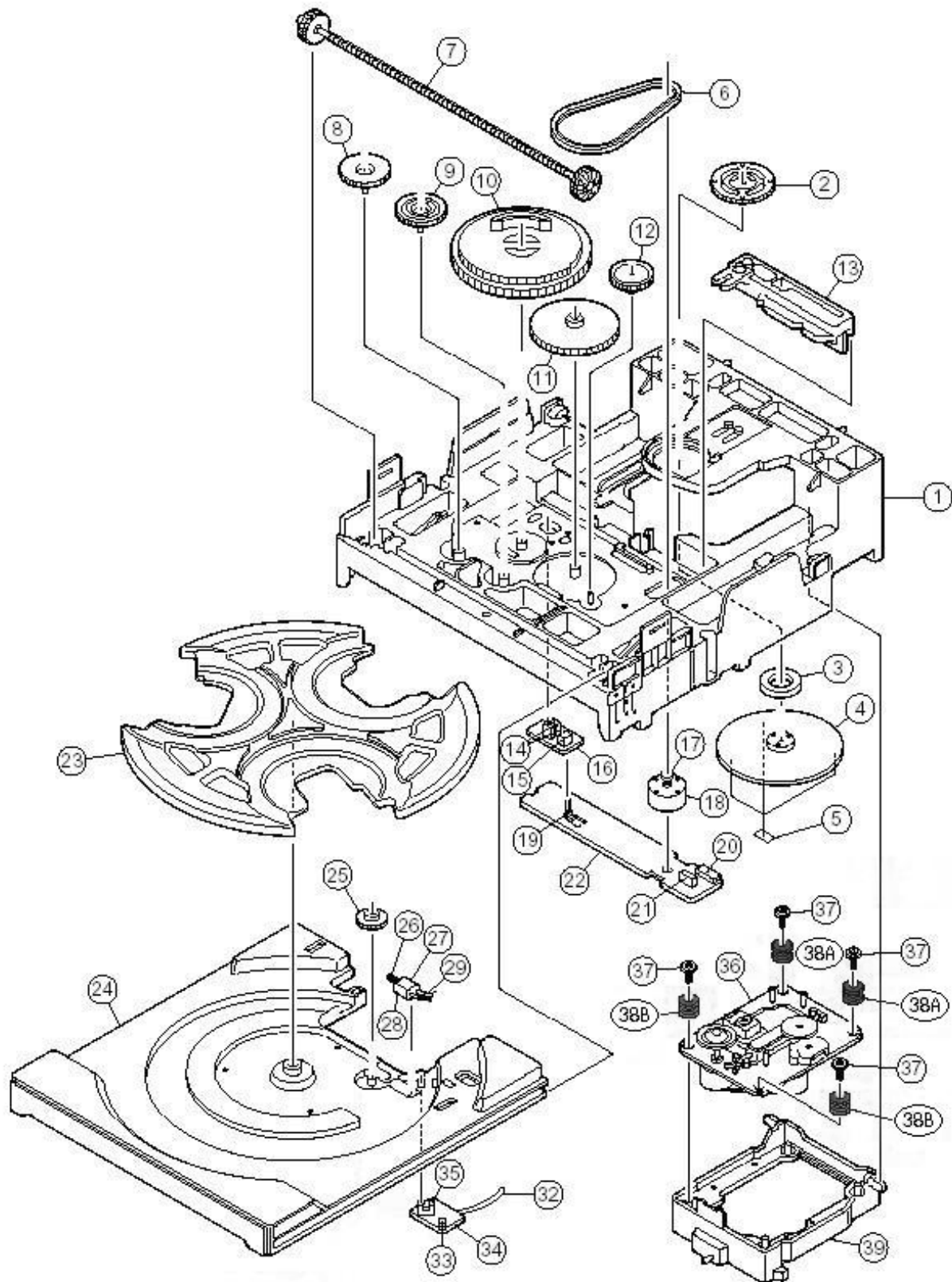
■ Parts list (General assembly)

	Item	Parts number	Parts name	Q'ty	Description	Area
	1	10-7835-06-01-X1	WINDOW DISPLAY AS	1	SAN 2495	
	2	10-7834-02-03-X1	LENS CASS L	1	SAN2495	
	3	10-7833-01-02-V1	BOX CASS L	1	HIPS 470	
	4	10-7834-12-03-X1	LENS CASS R	1	SAN2495	
	5	10-7830-01-01-V1	KONB VOL GOODMAN'S ABS NATURAL	1	ABS 700	
	6	10-7824-02-01-V1	RING VOL FOR QUELLE	1	ABS 700	
	7	10-7832-01-02-V1	BOX CASS R	1	HIPS 470	
	8	10-7836-05-03-X1	CABINET FRONT HIPS 94HB	1		
	9	10-2770-01-01-01	SPR, CASS R	1	SUS WPB Ø0.10	
	10	30-2197-01-01-V1	RUBBER FOOT	2		
	11	30-0924-01-01-01	DAMPER 70	1		
	12	20-2772-01-01-01	SPRING CASS LOCK L	1	SUS WPB Ø0.40	
	13	10-7737-01-01-X1	CASS LOCKER RIGHT	1	POM	
	14	30-0157-1-----U	CASS DECK	1		
	15	20-2547-0122W-1	CHAS MAIN MCX308/SECC	1	SBCC T=0.8mm	
	16	211-011110-001W0	TRANSFORMER	1		
	17	640-MXKB4K-02000	Board Assembly	1	696-MXKB4--020	
	18	20-2553-01-01-01	HLDR, HT SINK L	1	SBCC T=0.80mm	

■ Parts list (General assembly)


	Item	Parts number	Parts name	Q'ty	Description	Area
	19	20-2560-01-01-01	HLDR, HT SINK R	1	SBCC T=0.80mm	
	20	20-2556-01-01-02	HEAT SINK	1	AL T=3.0mm	
	21	10-7483-01-21-V1	COVER HT SINK FOR 308 PA-	1	HIPS 470	
	22	20-2550-11-12-X1	PANEL REAR FOR MCD - 338	1	SBCC T=0.80mm	
	23	34-0093-1	CD MECHANISM	1		
	24	20-2548-02-02-01	METAL, COVER MCX-308 FOR QUELLE	1	SBCC T=0.60mm	
	25	640-MX3382-02S00	MAIN Board Assembly	1	652-MX338*-02S	
	26	640-MX3383-02S00	PT PWB ASSEMBLY	1	653-MX338*-02S	
	27	10-7826-01-01-X1	FRAME KEY R	1	ABS 700	
	28	10-8171-01-01-V1	KEY, POWER ABS	1	ABS 700	
	29	10-7827-01-01-X1	FRAME KEY L	1	ABS 700	
	30	10-8173-02-01-X1	KEY, FUNCTION ABS	1		
	31	661-MXKB4-05S	KB4 CD DOOR PWB	2		
	32	10-8172-03-01-X1	CAP, KEY FUNCTION	1	PMMA CP51	
	33	30-0924-01-01-01	DAMPER 70	1		
	34	10-7831-07-21-X1	CD DOOR FOR MCD-338	1	94HB	
	35	20-2769-01-01-01	SPR, CASS L	1	SUS WPB Ø1.0	

## CD changer mechanism assembly and parts list



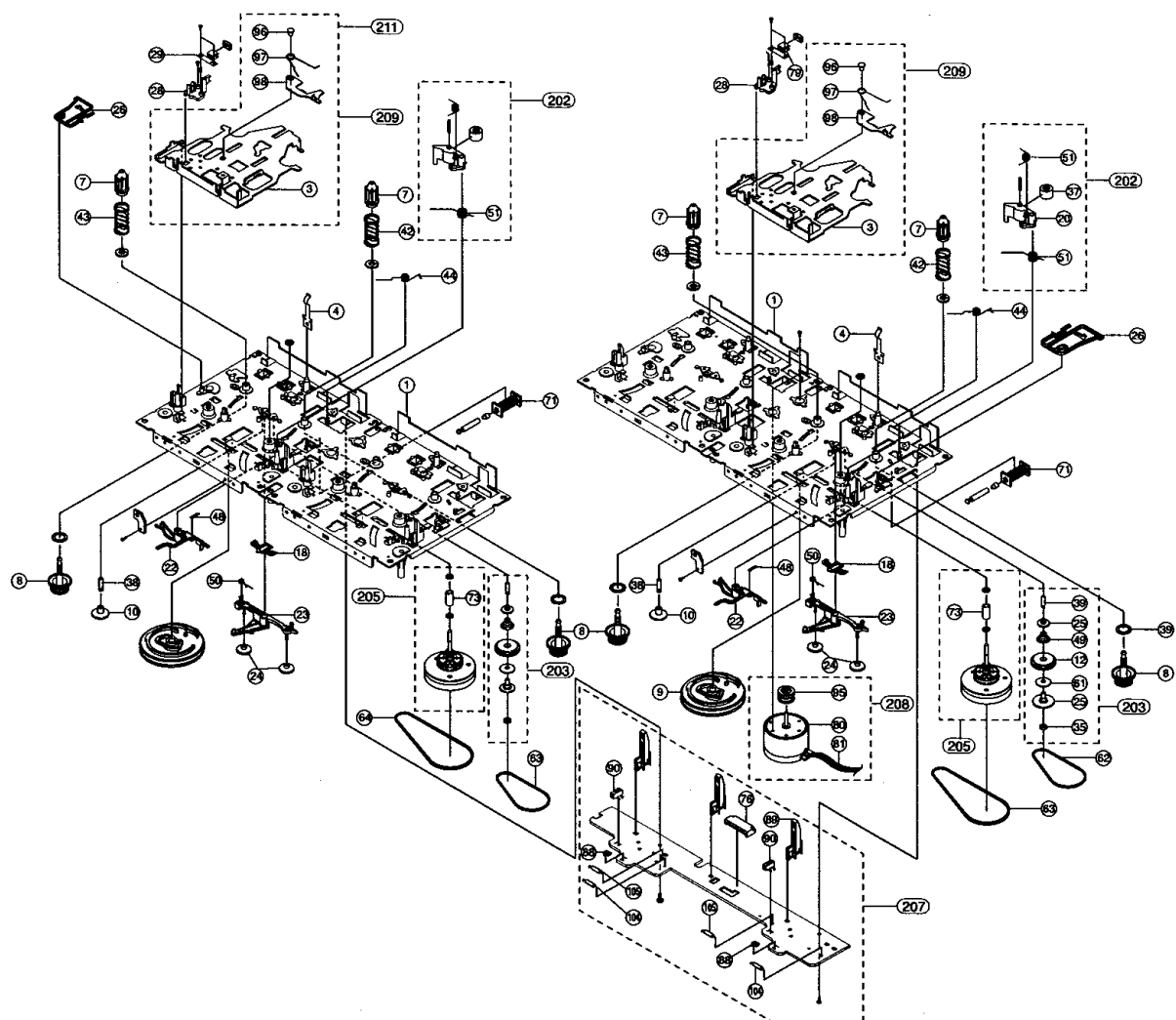


■ Parts list (CD changer mechanism)

	Item Location	Parts number	Description	Q'ty.	Remarks
	1	AJ7200601J	BASE-MAIN	1	1X1
	2	AJ6100601P	BRKT-CHUCK	1	
	3	3302000158	MAGNET-FERRITE	1	
	4	AJ7200601L	TABLE-CHUCK	1	1X4
	5	AJ6300601A	SHEET-CHUCK	3	
	6	AJ7300601B	BELT-LOAD	1	
	7	AJ6600601N	GEAR-SYNCR0	1	1X2
	8	AJ6600601L	GEAR-CONVERT	1	1X4
	9	AJ6600601M	GEAR-TRAY	1	1X4
	10	AJ6600601R	GEAR-CAM	1	1X2
	11	AJ6600601K	GEAR-LOAD	1	1X4
	12	AJ6600601J	GEAR-PULLEY	1	1X4
	13	AJ7200601N	SLIDER-CAM	1	1X4
	14	3405000101	SWITCH-MICRO	2	
	15	3711003379	CONNECTOR HEADER	1	
	16	AJ4100601K	PCB-SW	1	
	17	AJ6100601K	PULLEY-MOTOR	1	1X4
	18	AJ3100601F	MOTOR-DC	1	
	19	3710001248	CONNECTOR-SOCE	1	
	20	3711003692	CONNECTOR HEADER	1	
	21	3708001163	CONNECTOR-FPC	1	
	22	AJ4100601L	PCB-MECHA	1	
	23	AJ7200601P	TRAY-ROULETTE	1	1X2
	24	AJ7200601Q	TRAY-DISC	1	1X2
	25	AJ6600601Q	GEAR-ROULETTE	1	1X4
	26	AJ6600601P	GEAR-WORM	1	1X2
	27	AJ3100601K	MOTOR-LOADING	1	
	28	AJ6300601B	SHEET-MOTOR	1	
	29	AJ3900601A	WIRE-ROULETTE	1	
	32	AJ3900601B	WIRE-TRAY	1	
	33	3711000003	CONNECTOR HEADER	1	
	34	AJ4100601J	PCB-SENSOR	1	
	35	AJ3200601A	SENSOR-ROULETTE	1	
	36	AJ9050605F	CMS-B31NG6U	1	
	37	AJ6000601F	SCREW	4	
	38A	AJ7300601F	RUBBER-B31Y	2	
	38B	AJ7300601D	RUBBER-B31	2	
	39	AJ7200602F	LEVER-LIFTER	1	1X2
		205001082	GREASE-LITHUM	3.34G	
		202000155	SOLDER-WIRE FLUX	0.7Gr	
		AJ0200601B	BOND-LOCK SCREW	0.045G	
		AJ7300604A	RUBBER-HOOK	1	
		204000429	IPA(ALCHOL)	2.0Gr	
		AJ6800601G	INDICATOR SERIAL	1	
		AJ6900601M	PACKING PE-BAG	1	

# Cassette mechanism assembly and parts list

ARD268DSW



■ Parts list (Cassette mechanism)

⚠	Item Location	Parts number	Description	Q'ty.	Remarks
	202	MT9201010K	PINCH ARM F ASS'Y	2	
	20	MT7200022A	ARM PINCH F	1	
	53	6107000353	S/P PINCH (F)	1	
	37	MT7300010A	ROLLER PINCH	1	
	203	MT9222010C	CLUTCH ASS'Y	2	
	11	MT7200391A	BUSH C	1	
	12	MT7200387A	PULLEY C	1	
	25	MT7200392A	CAP C	1	
	49	6107001066	S/PC	1	
	61	MT7400092A	FELT C	1	
	35	6031000623	W/S	1	1.2*3.2*0.25
	204	MT9101012C	FLYWHEEL R ASS'Y	0	
	14	MT7200102A	PULLEY F/W R	0	
	41	MT7100496A	SHAFT F/W R2	0	
	30	6031000622	W/S	0	2.3*3.5*0.25
	205	MT9101011P	FLYWHEEL F ASS'Y	2	
	6	MT7000438M	PLATE FLYWHEEL F	0	
	13	MT7200386A	PULLEY F/W F	1	
	40	MT7100140A	SHAFT F/W F	1	
	30	6031000622	W/S	1	2.3*3.5*0.25
	207	MT9121019M	CONTROL PCB ASS'Y	1	
	75	MT4100144B	PCB CTRL	1	110
	76	3711K00001	CONN R/P	1	11P
	104	402000132	DIODE	2	
	88	0604K0001A	PHOTO SENSOR	2	
	89	3409001131	SWITCH-LEAF	3	
	90	3404000306	SWITCH MODE	2	
	105	2001K0001A	RESISTOR	2	3.0KΩ
	208	MT9115013Y	MOTOR ASS'Y	1	
	95	MT72K0028A	PULLEY M/T	1	
	80	3101K0019A	MOTOR	1	EG-530AD-2B(D)
	81	3809001038	MOTOR WIRE	1	
	209	MT9003010J	BASE HEAD B ASS'Y	2	
	2	MT7000376A	BASE-HEAD B	1	
	96	MT7100161A	SHAFT-BASE S	1	
	97	6107000335	SPR-SUB	1	
	98	MT7000468A	BASE-SUB HEAD	1	
	1	MT72K0016A	CHASSIS MAIN	1	
	4	MT7000438E	PLATE SPRING	2	
	5	MT7000494A	BRKT MOTOR	0	
	7	MT7200383A	CHIP REEL	4	
	8	MT7200384A	BASE REEL	4	
	9	MT7200385A	GEAR CAM	2	
	10	MT6600028A	GEAR IDLER	2	
	18	MT7200021A	LEVER BRAKE	2	
	22	MT7200388A	ARM CAM LOCK	2	
	23	MT7200389A	ARM RF	2	
	24	MT7200390A	GEAR RF	4	
	26	MT7200069A	LEVER EJECT	2	
	27	MT7200393A	GUIDE	0	
	28	MT7200373A	TAPE GUIDE	2	
	29	MT7200070A	LEVER RA	0	
	31	6031000462	W/S	2	1.8*4*0.5
	32	6031000448	W/S	1	1.6*3.5*0.5
	38	MT7100467A	SHAFT IDLER	2	
	39	MT7100471A	SHAFT RF	2	
	42	6107001063	S/P B.T(F)	2	
	43	6107001062	S/P B.T(R)	2	
	44	6107000331	S/P BASE HEAD	2	
	48	6107000350	S/P ARM CAM LOCK	2	
	50	6107000351	S/P ARM RF	2	
	51	6107000177	S/P P/R (F)	2	
	54	6107000223	S/P AZIMUTH	2	
	57	6009000336	SCREW	3	2.6*4
	58	6003000293	BH M	0	2*4
	59	6001000901	S/C AZIMUTH	2	
	62	6602001055	BELT SUB	2	Ø34.7*1.1*1.1
	63	6602001057	BELT MAIN	1	Ø55.8*1.3*1.3
	64	6602001056	BELT MAIN	1	Ø73*3.2*0.5
	71	MT7500049A	SOLENOID	2	20Ω
	72	MT0200001A	REFLECTOR	2	
	73	6601000120	METAL FG F	2	CAPS
	74	6601000114	METAL FG R	0	CAPS
	79	MT59K0021A	HEAD 1WAY	1	(HASVH55042)A
	108	MT59K0020A	HEAD 1WAY	1	(HASVH45051)A

## Main Board Parts List

Item	PWB TOP	PWB Bottom	Part Number	Description	Q'ty	Location	Remark
0			S52-MD338*-020	SMT FOR MAIN BOARD ASSY.	1		
1		O	RC0000105-A005V0	C-JUMPER, 1/10W J(+/-5%)	29	R422,R443,R521,R374,R375,R420,R441,JR28,JR1,JR2,JR3,JR4,JR8,JR10,JR11,JR12,JR13,JR29,JR30,JR32,JR33,JR34,JR35,JR301,JR302,JR303,JRB1,JRB2,JR305	
2		O	RC1000105-A005V0	C-RES 10 ohm 1/10W +/-5%	10	R401,R402,R405,R406,R415,R436,R458,R460,R538,R32	
3		O	RC2200105-A005V0	C-RES 22 ohm 1/10W +/-5%	10	R1,R11,RM3,RM4,RM5,RM6,RM7,RM8,RM9,RM10	
4		O	RC3900105-A005V0	C-RES 39 ohm 1/10W +/-5%	3	R462,RM27,RM29	
5		O	RC4700105-A005V0	C-RES 47 ohm 1/10W +/-5%	1	R708	
6		O	RC1010105-A005V0	C-RES 100 ohm 1/10W +/-5%	45	R312,R313,R315,R316,R317,R318,R319,R320,R321,R327,R328,R330,R337,R338,R365,R369,R393,R394,R429,R432,R710,R751,R810,R811,R815,R816,R780,R781,R329,R782,R802,R803,R805,R806,R6,R18,R817,R807,R7,RM12,RM20,RM22,RM23,RM24,RM26	
7		O	RC1510105-A005V0	C-RES 150 ohm 1/10W +/-5%	2	R446,R449	
8		O	RC2210105-A005V0	C-RES 220 ohm 1/10W +/-5%	4	R342,R343,R344,R360	
9		O	RC3310105-A005V0	C-RES 330 ohm 1/10W +/-5%	4	R9,R12,R57,RM25	
10		O	RC4710105-A005V0	C-RES 470 ohm 1/10W +/-5%	10	R563,R565,R356,R361,R363,R364,R8,R29,R340,RM32	
11		O	CC123250K-A042V0	C-CAP, 0.012UF 25V K X7R	1	C442	
12		O	CC150500J-A041V0	C-CAP, U 15P-50V J C0G	1	C2	
13		O	CC183500K-A042V0	C-CAP, 0.018uF 50V K X7R	2	C415,C430	
14		O	RC8230105-A005V0	C-RES 82K ohm 1/10W +/-5%	4	R702,R707,R723,R724	
15		O	CC103500K-A042V0	C-CAP, U 0.01UF-50V K X7R	24	C441,C445,C446,C448,C449,C518,C558,C707,C714,C724,C5,C9,C12,C30,C34,C41,C44,C57,C60,C82,C411,C434,C831,CM3	
16		O	CC223500K-A042V0	C-CAP,0.022uF 50V K X7R	11	C1,C303,C13,C19,C21,C27,C35,C36,C42,C88,C89	
17		O	CC333250K-A042V0	C-CAP,0.033uF 25V K X7R	2	C720,C731	
18		O	CC473500K-A042V0	C-CAP 0.047UF 50V K X7R	3	C4,C6,C708	
19		O	CC683160K-A042V0	C-CAP. 0.068uF 16V K X7R	2	C725,C727	
20		O	CC104250Z-A043V0	C-CAP, U 0.1UF-25V Z Y5V	44	C301,C302,C307,C412,C414,C431,C433,C701,C702,C716,C717,C719,C732,C733,C764,C766,C804,C807,C809,C813,C820,C821,C822,C823,C824,C825,C826,C827,C828,C829,C32,C65,C561,C830,C350,C352,C382,CM4,CM5,CM8,CM9,CM12,CM13,CM14	
21		O	CC474100K-A042V0	C-CAP,0.47uF 10V K X7R	2	C721,C722	
22		O	CC180500J-A041V0	C-CAP, U 18P-50V J C0G	1	C14	
23		O	RC1520105-A005V0	C-RES 1.5K ohm 1/10W +/-5	3	R5,R412,R439	
24		O	RC1820105-A005V0	C-RES 1.8K ohm 1/10W +/-5	4	R54,R333,R424,R517	
25		O	CC102500K-A042V0	C-CAP, 1000PF 50V K X7R	14	C314,C703,C705,C706,C718,C768,C774,C818,C819,C729,C26,C56,C58,C70	
26		O	RC1040105-A005V0	C-RES 100K ohm 1/10W +/-5	7	R518,R519,R731,R808,R809,R4,R31	
27		O	CC101500J-A041V0	C-CAP, U 100P-50V J C0G	14	C421,C423,C424,C501,C502,C520,C521,C63,C61,C62,C562,C563,C92,C93	
28		O	RC1030105-A005V0	C-RES 10K ohm 1/10W +/-5%	33	R339,R379,R389,R382,R425,R426,R428,R392,R453,R459,R463,R464,R520,R539,R540,R543,R544,R545,R551,R552,R553,R714,R718,R721,R722,R759,R760,R371,R372,R16,R35,R58,RM13	
29		O	CC100500D-A041V0	C-CAP, U 10P-50V D C0G	4	C18,C49,C712,C832	
30		O	CC122500K-A042V0	C-CAP,1200PF 50V K X7R	3	C810,C811,C812	
31		O	RC1240105-A005V0	C-RES 120K ohm 1/10W +/-5	1	R730	
32		O	RC1230105-A005V0	C-RES 12K ohm 1/10W +/-5%	1	R471	
33		O	CC120500J-A041V0	C-CAP,12PF 50V J C0G size	5	C7,C10,C51,C52,C16	
34		O	RC1540105-A005V0	C-RES 150K ohm 1/10W +/-5	3	R546,R554,R727	
35		O	RC1530105-A005V0	C-RES 15K ohm 1/10W +/-5%	6	R24,R725,R419,R433,RM30,RM31	
36		O	RC1830105-A005V0	C-RES 18K ohm 1/10W +/-5%	1	R715	
37		O	RC1020105-A005V0	C-RES 1K ohm 1/10W +/-5%	33	R3,R60,R61,R62,R341,R345,R346,R347,R348,R349,	

Item	PWB TOP	PWB Bottom	Part Number	Description	Q'ty	Location	Remark
38		O	RC1050105-A005V0	C-RES 1M ohm 1/10W +/-5%	4	R350,R351,R355,R385,R762,R410,R427,R451,R461, R510,R511,R757,R720,R314,R396,R2,R59,R69,R70, R79,R80,RM1,R395	
39		O	RC2220105-A005V0	C-RES 2.2K ohm 1/10W +/-5	24	R430,R717,R804,RM2 R331,R388,R404,R407,R416,R435,R457,R542,R547, R548,R550,R555,R556,R466,R467,R468,R469,R470, R377,R380,R56,R76,R77,R78,	
40		O	RC2720105-A005V0	C-RES 2.7K ohm 1/10W +/-5	2	R414,R437	
41		O	CC222500K-A042V0	C-CAP,2200PF 50V K X7R	7	C39,C40,C401,C402,C403,C404,C730	
42		O	CC221500J-A041V0	C-CAP, U 220P-50V J C0G	2	C81,C85	
43		O	RC2230105-A005V0	C-RES 22K ohm 1/10W +/-5%	17	R409,R431,R452,R456,R560,R561,R562,R716,R334, R399,R22,R63,R64,R65,R66,R67,R37	
44		O	CC220500J-A041V0	C-CAP, U 22P-50V J C0G	4	C315,C316,CM1,CM2	
45		O	CC270500J-A041V0	C-CAP, U 27P-50V J C0G	3	C805,C806,C311	
46		O	RC3320105-A005V0	C-RES 3.3K ohm 1/10W +/-5	9	R19,R30,R52,R444,R447,R450,R567,R549,R557	
47		O	CC332500K-A042V0	C-CAP, 3300PF 50V K X7R	1	C723	
48		O	RC3340105-A005V0	C-RES 330K ohm 1/10W +/-5	1	R516	
49		O	CC331500J-A041V0	C-CAP,330PF 50V J C0G siz	1	C728	
50		O	CC330500J-A041V0	C-CAP, U 33P-50V J C0G	4	C313,C83,C84,C833	
51		O	CC392500K-A042V0	C-CAP,3900PF 50V K X7R	1	C55	
52		O	CC391500J-A041V0	C-CAP,390PF 50V J C0G siz	4	C770,C771,C772,C773	
53		O	RC3930105-A005V0	C-RES 39K ohm 1/10W +/-5%	7	R514,R515,R703,R704,R705,R706,R728	
54		O	CC470500J-A041V0	C-CAP, U 47P-50V J C0G	1	C64	
55		O	CC472500K-A042V0	C-CAP, 4700PF 50V K X7R	5	C410,C419,C426,C435,C33	
56		O	RC4740105-A005V0	C-RES 470K ohm 1/10W +/-5	1	R75	
57		O	CC471500J-A041V0	C-CAP 470P 50V J C0G CER.	2	C453,C454	
58		O	CC020500C-A041V0	C-CAP 2PF 50V C COG SIZE:	1	C711	
59		O	RC5620105-A005V0	C-RES 5.6K ohm 1/10W +/-5	9	R421,R442,R509,R513,R719,R14,R25,R26,R711	
60		O	CC060500C-A041V0	C-CAP,6PF 50V C C0G size	1	C15	
61		O	RC5630105-A005V0	C-RES 56K ohm 1/10W +/-5%	2	R472,R473	
62		O	RC6820105-A005V0	C-RES 6.8K ohm 1/10W +/-5	4	R566,R761,R15,R20	
63		O	CC682500K-A042V0	C-CAP,6800PF 50V K X7R	1	C713	
64		O	RC6840105-A005V0	C-RES 680K ohm 1/10W +/-5	1	R391	
65		O	RC6830105-A005V0	C-RES 68K ohm 1/10W +/-5%	1	R23	
66		O	RC0820105-A005V0	C-RES 8.2 ohm 1/10W +/-5%	1	R701	
67		O	RC8220105-A005V0	C-RES 8.2K ohm 1/10W +/-5	6	R411,R413,R438,R440,R507,R508	
68		O	CC821500K-A042V0	C-CAP, U 820P-50V K X7R	4	C409,C436,C444,CM7	
69		O	2DTC114TK-A011V7	C-TR DTC114TK (0.2W) [ROH]	6	Q418,Q505,Q507,Q509,Q408,Q411	
70		O	2DTC323TK-A011V7	C-TR DTC323TK,SMT [ROHM]	3	Q406,Q409,Q420	
71		O	2DTA114YK-A011X7	C-TR, DTA114YK (0.2W) [RO]	2	Q405,QM2	
72		O	2SC3052F--A013VH	C-TR, AMPLIFY 2SC3052 (15	13	Q9,Q401,Q402,Q403,Q404,Q414,Q416,Q501,Q502, Q503,Q302,Q311,QM3	
73		O	RC3330105-A005V0	C-RES 33K ohm 1/10W +/-5%	1	R10	
74		O	1-2200-1-----X	C-IC AZ1117H-1.2TRE1	1	IC801	
75		O	1-1501-1-----X	C-IC HA12237 [HITACH]	1	IC401	
76		O	1-1740-1-----X	C-IC K4S161622H-uc60 CMOS	1	IC803	
77		O	1-1643-1-----X	C-IC,SIL9226 RF AMP & SER	1	IC701	
78		O	1-2201-1-----X	C-IC OTP MICON S3F828BXZZ	1	IC301	
79		O	1-2028-1-----X	C-IC S5L8310 CD-MP3 DECOR	1	IC804	
80		O	1-1323-1-----X	C-IC TDA7440D FUNCTION/TO	1	IC501	
81		O	RC1330105-A005V0	C-RES, 13K OHM 1/10W +/-	2	R752,R753	
82		O	RC2020105-A005V0	C-RES 2K ohm 1/10W +/-5%	1	R763	
83		O	RC1810105-A005V0	C-RES 180 ohm 1/10W +/-5%	2	R398,R758	
84		O	RC4730105-A005V0	C-RES 47K ohm 1/10W +/-5%	9	R17,R390,R454,R455,R559,R726,R732,R36,RM11	
85		O	RC4720105-A005V0	C-RES 4.7K ohm 1/10W +/-5	16	R403,R408,R423,R445,R448,R558,R709,R756,R27, R28,R53,R55,R503,R504,R397,RM18	
86		O	RC0000085-A003V0	C-JUMPER(0ohm) 1/8 +/-5%	9	JR6,JR7,JR16,JR17,JR31,JR21,JR24,JR304,R376	
87		O	RC3920105-A005V0	C-RES 3.9K ohm 1/10W +/-5	2	R417,R434	
88		O	CC561500J-A041V0	C-CAP,U 560P 50V J COG	1	C91	

Item	PWB TOP	PWB Bottom	Part Number	Description	Q'ty	Location	Remark
89		O	CC080500D-A041V0	C-CAP,8PF 50V D C0G size	1	C8	
90		O	2DTC114YK-A011X7	C-TR, DTC114YK (0.2W)	3	Q5,Q6,Q303	
91		O	1-1313-1-----X	C-IC BU1924F RDS DECODER[	1	IC3	
92		O	RC1210105-A005V0	C-RES 120 ohm 1/10W +/-5%	1	R801	
93		O	18A916121-A005V0	F-BEAD 120ohm @ 100MHz 9M	5	L806,L303,LM1,LM5,LM6	
94		O	CC240500J-A041V0	C-CAP,24PF 50V J C0G size	1	C312	
95		O	RC8200105-A005V0	C-RES 82 ohm 1/10W +/-5%	1	R750	
96		O	CC104250K-A042V0	C-CAP. 0.1uF 25V K X7R	1	C317	
97		O	1-0395-2-----V	C-IC, OP/AMP,BA4558F (SOP	1	IC503	
98		O	RC6220105-A005V0	C-RES 6.2K ohm 1/10W +/-5	2	R505,R506	
99		O	CC681500J-A041V0	C-CAP,680PF 50V J CH SIZE	1	C28	
100		O	RC2730105-A005V0	C-RES 27K ohm 1/10W +/-5%	1	R21	
101		O	3LL4148---A018X0	SWITCH DIODE,LL4148, SMD	7	D303,D304,D305,D308,D311,D403 ,DM2	
102		O	1-2096-1-----X	C-IC USB CONTROL TMC51F 4	1	UM1	
103		O	1-1822-1-----X	CD DRIVER-IC (ICBA5927 FM	1	IC702	
104		O	26BLM21B--A000V0	C-COIL,S BLM21B272S SIZE:	5	LM3,LM4,L506,L507,L508	
105		O	26BK2125H-A000V0	C-COIL BK2125HM601	2	LM7,LM9	
106		O	RC1130105-A005V0	C-RES, 11K OHM 1/10W +/-	2	R754,R755	
107		O	RC2240105-A005V0	C-RES 220K ohm 1/10W +/-5	1	R729	
108		O	CC181500J-A041V0	C-CAP, U 180P-50V J C0G	1	CM6	
109	O		CM103101K-P015V0	Mylar cap 0.01uF +/-10% 1	2	C438,C439	
110	O		CM823101K-P015V0	Mylar cap 0.082uF +/-10%	4	C504,C505,C515,C516	
111	O		CM224101K-P015V0	MYLAR CAP 0.22uF +/-10% 1	2	C522,C523	
112	O		21-0150-3-----V	VIB XTAL 4.332MHz CSA-309	1	X2	
113	O		CE474500M-P015Y0	Elect. Cap. 0.47uF +/-20%	1	C24	
114	O		3KV1520NT-P000VG	VARACTOR DIODE KV1520NT-C	1	D7	
115	O		CE105500M-P015Y0	Elect.Cap. 1uF +/-20% 50	18	C318,C406,C425,C506,C507,C508,C509,C510,C511, C512,C513,C524,C526,C549,C553,C23,C25,C54	
116	O		CE106160M-P015Y0	Elect. Cap. 10uF +/-20%	1	C726	
117	O		CE106250M-P015Y0	Elect. Cap. 10uF +/-20%	3	C31,C405,C407	
118	O		CE106500M-P015Y0	Elect. Cap. 10uF +/-20%	1	C517	
119	O		RC2200085-M000V0	RES 22 ohm 1/8W +/-5% 26m	1	R34	
120	O		CE107100M-P015Y0	Elect. Cap. 100uF +/-20%	20	C551,C554,C557,C709,C710,C763,C767,C803,C808,C814, C815,C304,C319,C3,C11,C20,C22,C59,C86,C90	
121	O		CE107160M-P015Y0	Elect. Cap. 100uF +/-20%	5	C420,C422,C440,C447,C451	
122	O		CE108100M-P015Y0	Elect. Cap. 1000uF +/-20%	1	C305	
123	O		26101000K-M002V4	"Fixed Inductor 100uH CEC	2	L8,L12	
124	O		26100000K-N000V4	Fixed inductor 10uH CECSS	7	L301,L702,L801,L802,L803,L804,L805	
125	O		RC1510085-M000V0	RES 150 ohm 1/8W +/-5% 26	1	R33	
126	O		21-0236-1----X	Crystal 16.9344MHz HC-49U	1	X801	
127	O		31N4001---M000X6	Diode IN-4001,26mm TAPE	1	D502	
128	O		31SS133---M000V7	Diode 1SS133 26mm TAPE	23	D1,D2,D3,D4,D5,D6,D10,D301,D302,D307,D401, D402,D404,D501,D503,D504,D506,D508,D50,D51, D53,D505,D712	
129	O		CE225500M-P015Y0	Elect. Cap. 2.2uF +/-20%	3	C37,C38,C87	
130	O		CH473500K-M019V0	Axial Ceramic Cap.0.047uF	1	L1	
131	O		CE226250M-P015Y0	Elect. Cap. 22uF +/-20%	1	C45	
132	O		26221000K-M002V4	FIXED INDUCTOR 220uH +/-1	1	L50	
133	O		26150000K-M002X4	Fixed Inductor 15uH CECSS	1	L6	
134	O		CE335500M-P015Y0	Elect. Cap. 3.3uF +/-20%	1	C17	
135	O		21-0101-2-----X	X'TAL 32.768 KHz +/-5ppm D	1	XT301	
136	O		CE475500M-P015Y0	Elect. Cap. 4.7uF +/-20%	14	C413,C417,C418,C427,C428,C432,C450,C525,C552, C556,C715,C816,C817,C29	
137	O		CE476160M-P015Y0	Elect. Cap. 47uF +/-20%	5	C43,C53,C559,C704,CM10	
138	O		CE476250M-P015Y0	Elect. Cap. 47uF +/-20%	5	C519,C550,C555,C306,C769	
139	O		CE477100M-P015Y0	Elect. Cap. 470uF +/-20%	1	C765	
140	O		CM562101K-P015V0	MYLAR CAP 5600pF +/-10% 1	2	C503,C514	
141	O		21-0094-1-----X	Crystal 75KHz CFV-206 +/-	1	X1	
142	O		18A843556-N000V2	F-BEAD 843556 TB36 TAPING	11	L302,L2,L501,L503,L5,L808,L304,L505,LM8,J137,J142	




Item	PWB TOP	PWB Bottom	Part Number	Description	Q'ty	Location	Remark
143	O		29JT10.7M-P015X3	Ceramic Discriminator 10.	1	CF3	
144	O		29-0154-1-----X	CF & COIL PCFAZHY-AC009 A	1	T1	
145	O		6-0520-1-----X	IFT COIL 7mm MW ANT No: O	1	L3	
146	O		6-0517-1-----X	IFT COIL 7mm MW OSC No: A	1	L4	
147	O		Z-25-0911-01V-X	TUNER FM FRONT END PAD C8	1	FE1	
148	O		6-0507-1-----X	10mm IFT COIL AC BIAS OSC	1	T401	
149	O		12P10-0035-1--V	PH-10P+UL1007 AWG#30 L=16	1	CN703	
150	O		12S3-0039-----V	CONN, 3P V 2mm JMT [AIWA]	2	CN205,CN401	
151	O		12P6-0142-1---V	PH-6P+UL1007 AWG#30 L=120	1	CN702	
152	O		12S8-0024-----V	CONN 8PIN V 2mm	1	CN402	
153	O		12S16-0031----V	CONN 16P V FFC/FPC PITCH=	1	CN701	
154	O		12S11-0020----V	CONN 11PINS V FFC/FPC PIT	1	CN403	
155	O		12S22-0006----V	CONN,22P V FFC/FPC P=1.25	1	CN601	
156	O		1-1006-1-----X	IC , NJM7808FA 8V REGULAT	1	IC802	
157	O		2KTA1266G-P000V8	TR KTA1266GR (87-026-609-	1	Q701	
158	O		2KTA1273Y-P000V8	TR, KTA1273Y PNP TO-92 AI	4	Q310,Q415,Q417,Q419	
159	O		2KTA1267G-P000V8	TR, KTA1267GR (0.4W)AI Ra	5	Q10,Q407,Q410,Q504,Q506	
160	O		2KTC3194--P000V8	TR,KTC3194O NPN TO-92 AI	1	Q1	
161	O		2KTC3200G-P000V8	TR, KTC3200GR NPN TO-92	1	Q413	
162	O		2KTC3203Y-P000X8	TR,KTC3203 Y NPN TO-92 AI	1	Q412	
163	O		2KTC3205--P000X8	TRANSISTOR KTC3205 NPN TO	2	Q312,Q703	
164	O		1-1326-1-----X	IC LA1833N TUNER SYSTEM	1	IC1	
165	O		1-1327-1-----X	IC LC72136N PLL [SANYO]	1	IC4	
166	O		3UZ11BSC--M000V0	ZENER,DIODE UZ11BSC 26mm	1	D507	
167	O		29ZTA8.00-P015X1	Ceramic Resontor 8MHz "ZT	1	XT302	
168	O		29-0091-1-----X	Ceramic Filter MS2 GHY,R	1	CF1	
169	O		23-F019-1-----V	Terminal Ant PAL 2P HSP-3	1	J302	
170			25-1419-G02V--X	PWB MAIN 245x195mm T=1.6m	1		
171	O		3UZ3.6BSB-M000V0	ZENER UZ3.6BSB 26mm TAPE	3	D710,D13,D711	
172	O		3UZ4.7BSA-M000V0	ZENER UZ4.7BSA 26mm	1	D306	
173	O		2SC1815GR-P000V6	Transistor 2SC1815GR (400	3	Q304,Q508,Q704	
174	O		11-A050-M0----Y	Black Wire 50mm UL1007 #1	1	P1	
175	O		12S16-0033----V	CONN,16P V FFC/FPC P=1.25	1	CN201	
176	O		29-0095-1-----X	Ceramic Filter SFE10.7 MS	1	CF2	
177	O		2DTA114YS-P002V7	"Transistor DTA114YS AI R	3	Q7,Q8,Q12	
178	O		2KTC3195Y-P000X8	TR,KTC3195 Y NPN TO-92M A	1	Q11	
179	O		RC4700085-M000V0	RES 47ohm 1/8W +/-5% 26mm	1	R512	
180	O		RC0220025-N000V0	Res 2.2 ohm J C 1/2W 52mm	1	R764	
181	O		CH104500K-M019V0	Axial Cer Cap. 0.1uF +/-1	2	C801,C802	
182	O		RC1030085-M000V0	RES 10 K 1/8W J 26mm TAPE	2	R501,502	
183	O		RC1210085-M000V0	RES 120 ohm 1/8W +/-5% 26	1	R814	
184	O		CE475500M-P415Y0	Elect.cap 4.7uf +/-20% 50	2	C527,C528	
185	O		30-1635-01-01-01	CUSH-S,PWB	3		
186	O		12S4-0026-----X	CONN. 4P V PITCH=2.0mm	1	CNM1	
187	O		21-0263-1-----V	CRYSTAL X-TAL/SJK-6A-12.0	1	XM1	
188	O		26220000K-M002V4	Fixed Inductor 22uH +/-10	1	LM2	
189	O		RF0047045-N000VP	FUSIBLE RESISTOR 0.47 ohm	1	RM28	
190	O		3UZ3.9BSB-M000XJ	ZENER,UZ3.9BSB 26mm TAPE	1	D309	
191	O		RC2220085-M000V0	RES 2.2K ohm 1/8W +/-5% 2	1	R332	
192	O		RC4710085-M000V0	Res 470 OHM 1/8W J C 26mm	1	R301	
193	O		RC1010085-M000V0	RES 100 OHM 1/8W J 26mm T	22	R13,R302,R303,R304,R305,R306,R307,R308,R309,R310, R311,R322,R323,R324,R335,R336,R357,R358,R359, R366,R370,R378	
194	O		RC1020085-M000V0	RES 1 K 1/8W J 26mm TAPE	5	R51,R353,R354,R812,R813	
195	O		RC1020085-N000V0	RES,1K ohm 1/8W +/-5% 52m	1	R367	
196	O		CE227160M-P015Y0	Elect. Cap. 220uF +/-20%	2	CM11,C351	

## Front Board Parts List

Item	PWB TOP	PWB Bottom	Part Number	Description	Q'ty	Location	Remark
0			S53-MX338*-02S	SMD For LED Sub-Assembly	1		
1		O	RC0000105-A005V0	C-JUMPER, 1/10W J(+/-5%)	2	R290,R297	
2		O	RC0100105-A005V0	C-RES 1 ohm 1/10W +/-5%	2	R207,R208	
3		O	RC2200105-A005V0	C-RES 22 ohm 1/10W +/-5%	1	R209	
4		O	RC1010105-A005V0	C-RES 100 ohm 1/10W +/-5%	4	R205,R291,R292,R293	
5		O	RC2210105-A005V0	C-RES 220 ohm 1/10W +/-5%	1	R206	
6		O	RC1120105-A005V0	C-RES, 1.1K OHM 1/10W +/-	3	R216,R224,R232	
7		O	RC1220105-A005V0	C-RES 1.2K ohm 1/10W +/-5	3	R217,R225,R233	
8		O	RC2020105-A005V0	C-RES 2K ohm 1/10W +/-5%	5	R219,R227,R235,JR201,JR202	
9		O	CC103500K-A042V0	C-CAP, U 0.01UF-50V K X7R	3	C201,C202,C210	
10		O	RC2730105-A005V0	C-RES 27K ohm 1/10W +/-5%	1	R210	
11		O	CC102500K-A042V0	C-CAP, 1000PF 50V K X7R	6	C204,C221,C222,C224,C230,C231	
12		O	RC1030105-A005V0	C-RES 10K ohm 1/10W +/-5%	7	R213,R214,R239,R240,R246,R241,R212	
13		O	RC6220105-A005V0	C-RES 6.2K ohm 1/10W +/-5	3	R222,R230,R238	
14		O	RC1820105-A005V0	C-RES 1.8K ohm 1/10W +/-5	3	R218,R226,R234	
15		O	RC3020105-A005V0	C-RES 3K ohm 1/10W +/-5%	3	R220,R228,R236	
16		O	1-1666-1-----X	C-IC S5G5128A VFD DRIVER	1	IC202	
17		O	RC3920105-A005V0	C-RES 3.9K ohm 1/10W +/-5	3	R221,R229,R237	
18		O	2DTC114TK-A011V7	C-TR DTC114TK (0.2W) [ROH	2	Q201,Q205	
19		O	RC9110105-A005V0	C-RES 910 ohm 1/10W +/-5%	3	R215,R223,R231	
20		O	RC1020105-A005V0	C-RES 1K ohm 1/10W +/-5%	3	R248,R249,R250	
21		O	CC104500K-A042V0	C-CAP.S 0.1UF 50V K B CER	7	CM15,C209,C212,C213,C220,C225,C226	
22		O	CC101500J-A041V0	C-CAP, U 100P-50V J C0G	3	C227,C228,C229	
23		O	RC4730105-A005V0	C-RES 47K ohm 1/10W +/-5%	34	R251,R252,R253,R254,R255,R256,R257,R258, R259,R260,R261,R262,R263,R264,R265, R267,R268,R269,R270,R271,R272,R273, R274,R275,R276,R277,R278,R279,R280, R281,R282,R283,R284,R296	
24		O	RC8200105-A005V0	C-RES 82 ohm 1/10W +/-5%	2	R285,R286	
25		O	26BLM21B--A000V0	C-COIL,S BLM21B272S SIZE:	4	LM9,LM10,LM11,LM12	
26		O	3LL4148---A018X0	SWITCH DIODE,LL4148, SMD	2	DM2,DM3	
27		O	RC3330105-A005V0	C-RES 33K ohm 1/10W +/-5%	2	R294,R295	
28	O		CH223500K-M019V0	Axial Ceramic Cap.0.022uF	1	C236	
29	O		CE106500M-P010Y0	Elect.Cap. 10uF +/-20% 50	1	C203	
30	O		CE107500M-P015Y0	Elect. Cap. 100uF +/-20%	1	C211	
31	O		26100000K-M002V4	FIXED INDUCTOR 10UH +/-10	1	L201	
32	O		26010000K-M002X4	*Fixed Inductor 1uH LAP02	1	L202	
33	O		CE226500M-P010Y0	Elect.Cap. 22uF +/-20% 5	2	C205,C207	
34	O		18A843556-N000V2	F-BEAD 843556 TB36 TAPING	1	L203	
35	O		12P4-0234-1---V	CONN,ASSY 4Pins PLUG P=2.	1	CW202	
36	O		8-0440-1-----V	SW,RTRY, RE012307PVB30	1	VR201	
37	O		27-0226-1-----V	VFD HNA-16LM36T	1	FL201	
38	O		12S16-0034----V	CONN,16P H FFC/FPC P=1.25	1	CW201	
39	O		28-0116-1-----V	LED SLR-56VR3F RED	1	LD201	
40	O		1-1529-1-----X	IC REMOTE CONTROL SENSOR	1	IC201	
41	O		8SKRGAED0-P015V2	TACT SWITCH SKRGAED010 PI	28	S201,S202,S203,S204,S205,S206,S207,S208, S209,S210,S211,S212,S213,S214,S215, S216,S217,S218,S219,S220,S221,S222, S223,S224,S225,S226,S227,S228	
42			25-1421-G02V--X	FRONT BOARD 94V0 SIZE:163	1		
43	O		10-7481-01-01-01	HLDR,LED	1		
44	O		20-2552-01-01-01	HLDR,VFD KA6	2		
45	O		20-2559-01-01-01	HLDR REMOTE SENSOR	1		
46	O		30-1923-01-01-01	RUBBER, VFD KA6 ELA t=0.5	2		
47	O		11-AT160-B0--V	BLACK WIRE WITH PLUG TERM	2	W201,W202	
48	O		31SS133---M000V7	Diode 1SS133 26mm TAPE	5	D206,D201,D202,D207,D208	
49	O		23-0148-1-----V	EARPHONE JACK (PJ-310H)	2	JK201,JK202	
50	O		12P3-0232-----Y	3Pins plug(S2M-3H+B2011HV	1	CW205	
51	O		CE108100M-P015Y0	Elect. Cap. 1000uF +/-20%	1	C233	
52	O		30-2099-01-01-V1	FILTER SHEET FOR VFD T=0.	1		
53	O		23-B162-1-----V	USB A/F 180 degrees DIP	1	JKM1	
54	O		11-B060-J0-----V	JUMP WIRE 60mm(5+5) UL100	1	FROM W202A TO W202B	
55	O		12P4-0296-----Y	4P CONNECTOR SHIELD WIRE	1	CWM1	

## AMP Board Parts List

Item	PWB TOP	PWB Bottom	Part Number	Description	Q'ty	Location	Remark
0			S96-MXKB4--020	SMT Power Amplifier Board	1		
1		O	RC1220105-A005V0	C-RES 1.2K ohm 1/10W +/-5	1	R669	
2		O	RC4710105-A005V0	C-RES 470 ohm 1/10W +/-5%	1	R646	
3		O	RC5610105-A005V0	C-RES 560 ohm 1/10W +/-5%	2	R617,R621	
4		O	RC8210105-A005V0	C-RES 820 ohm 1/10W +/-5%	1	R600	
5		O	CC153500K-A042V0	C-CAP,0.015uF 50V K X7R	2	C655,C656	
6		O	CC103500K-A042V0	C-CAP, U 0.01UF-50V K X7R	2	C612,C615	
7		O	CC223500K-A042V0	C-CAP,0.022uF 50V K X7R	1	C651	
8		O	CC104250Z-A043V0	C-CAP, U 0.1UF-25V Z Y5V	5	C601,C602,C603,C604,C608	
9		O	RC1040105-A005V0	C-RES 100K ohm 1/10W +/-5	3	R650,R651,R652	
10		O	RC1030105-A005V0	C-RES 10K ohm 1/10W +/-5%	5	R644,R645,R661,R663,R655	
11		O	CC121500J-A041V0	C-CAP,120PF 50V J C0G siz	1	C649	
12		O	RC1540105-A005V0	C-RES 150K ohm 1/10W +/-5	1	R610	
13		O	RC1530105-A005V0	C-RES 15K ohm 1/10W +/-5%	2	R638,R639	
14		O	RC1020105-A005V0	C-RES 1K ohm 1/10W +/-5%	8	R636,R637,R642,R643,R662,R664,R605,R654	
15		O	RC2220105-A005V0	C-RES 2.2K ohm 1/10W +/-5	6	R607,R628,R629,R630,R631,R659	
16		O	CC120500J-A041V0	C-CAP,12PF 50V J C0G size	2	C637,C638	
17		O	RC3320105-A005V0	C-RES 3.3K ohm 1/10W +/-5	1	R606	
18		O	RC3920105-A005V0	C-RES 3.9K ohm 1/10W +/-5	1	R660	
19		O	RC3330105-A005V0	C-RES 33K ohm 1/10W +/-5%	1	R620	
20		O	RC4720105-A005V0	C-RES 4.7K ohm 1/10W +/-5	4	R601,R612,R626,R627	
21		O	RC4740105-A005V0	C-RES 470K ohm 1/10W +/-5	1	R647	
22		O	CC471500J-A041V0	C-CAP 470P 50V J C0G CER.	2	C633,C634	
23		O	RC4730105-A005V0	C-RES 47K ohm 1/10W +/-5%	1	R658	
24		O	RC5630105-A005V0	C-RES 56K ohm 1/10W +/-5%	3	R611,R619,R623	
25		O	RC6840105-A005V0	C-RES 680K ohm 1/10W +/-5	1	R657	
26		O	CC472500K-A042V0	C-CAP, 4700PF 50V K X7R	2	C639,C640	
27		O	2DTA114YK-A011X7	C-TR, DTA114YK (0.2W) [RO	3	Q603,Q620,Q621	
28		O	2DTC114TK-A011V7	C-TR DTC114TK (0.2W) [ROH	1	Q624	
29		O	2DTC114EK-A011V7	C-TR, DTC114EK (0.2W)[ROH	1	Q606	
30		O	2SC3052F--A013VH	C-TR, AMPLIFY 2SC3052 (15	7	Q605,Q609,Q610,Q615,Q616,Q617,Q618	
31		O	RC0000105-A005V0	C-JUMPER, 1/10W J(+/-5%)	3	JR601,R618,R622	
32		O	2DTC114TK-A011V7	C-TR DTC114TK (0.2W) [ROH	1	Q619	
33		O	2DTC323TK-A011V7	C-TR DTC323TK,SMT [ROHM]	4	Q611,Q612,Q622,Q623	
34		O	RC2720105-A005V0	C-RES 2.7K ohm 1/10W +/-5	2	R624,R625	
35	O		CM682101K-P015V0	MYLAR CAP 6800pF +/-10% 1	8	C617,C618,C619,C620,C621,C622,C627,C628,	
36	O		CM104101K-P015V0	Cap. 0.1 UF K Mylar 100V	4	C645,C646,C647,C648	
37	O		RM-0015-30----V	METAL OXIDE FILM RESISTOR	4	R632,R633,R634,R635	
38	O		CE105500M-P015Y0	Elect.Cap. 1uF +/-20% 50	1	C644	
39	O		CE106250M-P015Y0	Elect. Cap. 10uF +/-20%	2	C614,C654	
40	O		RF1010025-N000VP	FUSIBLE RES, 100ohm J 1/2	4	R613,R614,R640,R641	
41	O		CE107100M-P015Y0	Elect. Cap. 100uF +/-20%	2	C635,C636	
42	O		CE107160M-P015Y0	Elect. Cap. 100uF +/-20%	1	C609	
43	O		CE107250M-P015Y0	Elect. Cap. 100uF +/-20%	1	C607	
44	O		CE107101M-P015Y0	Elect. Cap. 100uF +/-20%	2	C631,C632	
45	O		RM1020N25-N000V1	METAL OXIDE FILM FIXED RE	2	R615,R616	
46	O		31N4003SE-N000XN	Diode 1N4003 200V 1A [GOO	6	D601,D602,D603,D605,D606,D613	
47	O		31SS133---M000V7	Diode 1SS133 26mm TAPE	10	D618,D619,D620,D621,D622,D623, D624,D625,D626,D629	
48	O		CE226500M-P015Y0	Elect. Cap. 22uF +/-20%	3	C611,C613,C652	
49	O		CE227100M-P015Y0	Elect. Cap. 220uF +/-20%	1	C653	
50	O		RF3300025-N000V0	Fusible metal film resist	1	RF601	
51	O		CE-338-71-M-2-Y	CAP E 3300uF 71V M 85 GS	2	C625,C626	
52	O		26-0114-1----X	SPRING COIL 3.0 uH+/-15%	2	L601,L602	
53	O		RC0470045-N000V0	RES, 4.7 ohm 1/4W +/-5% 5	2	R648,R649	
54	O		3-RS402M-1----V	BRIDGE RECTIFIER RS402M 1	1	D614	
55	O		CE475500M-P015Y0	Elect. Cap. 4.7uF +/-20%	3	C641,C642,C643	
56	O		CE476160M-P015Y0	Elect. Cap. 47uF +/-20%	1	C650	
57	O		CE476630M-P015Y0	Elect. Cap. 47uF +/-20%	1	C610	
58	O		CE477100M-P015Y0	Elect. Cap. 470uF +/-20%	1	C616	
59	O		CE-478-25-M-6-Y1	CAP E 4700uF 25V 85 GS	1	C605	

Item	PWB TOP	PWB Bottom	Part Number	Description	Q'ty	Location	Remark
60	O		CM562101J-P015V0	MYLAR CAP 5600pF +/-5% 10	2	C629,C630	
61	O		CE-478-35-M-6-Y1	CAP E 4700uF 35V M 85 GS	2	C624,C623	
62	O		12S4-0047-----X	4 PINS SOCKET CONNECTOR(1	1	CN202	
63	O		3-GBU6J-1-----V	DIODE G5SBA60L-6088	1	D615	
64	O		12S22-0006-----V	CONN,22P V FFC/FPC P=1.25	1	CW601	
65	O		2KTA1273Y-P000V8	TR, KTA1273Y PNP TO-92 AI	1	Q607	
66	O		2KTA1267G-P000V8	TR, KTA1267GR (0.4W)AI Ra	2	Q613,Q614	
67	O		2-KTB1366Y-8--X	TR,KTB1366Y PNP TO-220IS	2	Q604,Q608	
68	O		3UZ12BSC--M000V0	ZENER,UZ12BSC 26mm TAPE	1	D607	
69	O		3UZ12BSC--M000V0	ZENER,UZ12BSC 26mm TAPE	2	D616,D617	
70	O		3UZ30BSD--M000XJ	ZENER DIODE UZ30BSD 26mm	1	D609	
71	O		3UZ5.6BSB-M000V0	ZENER UZ5.6BSB 26mm TAPE	1	D611	
72	O		3UZ6.2BSB-M000V0	ZENER,UZ6.2BSB 26mm TAPE	1	D610	
73	O		8-RL-0019-1---V	RELAY DC 12V ME-7C-012-2H	1	RY601	
74	O		23-0127-1-----V	TERMINAL SP 4P R/R/BK/BK	1	JK601	
75			25-1288-G01V --X	PWB KB4 POWER AMP THK=1.6	1		
76	O		RC1010085-N000V0	RES,100 ohm 1/8W +/-5% 52	2	R608,R609	
77	O		12S4-0026-----X	CONN. 4P V PITCH=2.0mm	1	CN902	
78	O		RM1020N25-N000V1	METAL OXIDE FILM FIXED RE	2	R665,R666	
79	O		RC1000085-M000V0	RES 10 ohm 1/8W +/-5% 26m	1	R653	
80	O		20-2555-01-01-01	HT,SINK TRANSISTOR KA6	1		
81	O		RT-0006-11-B3	RH/TS 3xL8mm (B-TYPE)	4	4-HEAT SINK(M)/TRASISTOR	
82	O		12S9-0025-----V	CONN,9P V P=2.5mm CKM250/	1	CN903	
83	O		RC1500085-M000V0	RES 15 ohm 1/8W +/-5% 26m	1	R656	
84	O		11-A050-M0----Y	Black Wire 50mm UL1007 #1	1	W901	
85	O		RC5620085-M000V0	RES 5.6 K 1/8W J ,26mm TA	1	R671	
86	O		RC3300045-M000V0	RES 33 ohm 1/4W +/-5% 26m	1	R672	












## PT Board Parts List

Item	PWB TOP	Bottom	Part Number	Description	Q'ty	Location	Remark
1	O		20-1196-01-01-X1	Fuse Holder (87-A90-160-0	4	F901,F902	⚠
2	O		20-1323-01-01-X1	Terminal 1P MSC (TERMINAL	2	TB901,902	⚠
3	O		CH223250Z-M018V0	AXIAL CERAMIC CAP.0.022uF	4	C901,C902,C903,C904	
4	O		31N4001---M000X6	Diode IN-4001,26mm TAPE	4	D902,D903,D904,D905	
5	O		31SS133---M000V7	Diode 1SS133 26mm TAPE	3	D901,D907,D906	
6	O		2DTC114YS-P002X7	*Transistor DTC114YS (0.3	3	Q901,Q902,Q903	
7	O		1-0185-1-----X	IC NJM78L05	1	IC901	
8	O		8-RL-0013-1---X	RELAY,12V G5PA-1-8 [OMRON	1	RL901	⚠
9	O		RC1000085-M000V0	RES 10 ohm 1/8W +/-5% 26m	1	R901	
10	O		RC4720085-M000V0	Res 4.7K 1/8W J C 26mm TA	1	R902	
11	O		RC1030085-M000V0	RES 10 K 1/8W J 26mm TAPE	1	R903	
12	O		CE477250M-P015Y0	Elect. Cap. 470uF +/-20%	1	C905	
13	O		CE335500M-P015Y0	Elect. Cap. 3.3uF +/-20%	1	C907	
14	O		CE107100M-P015Y0	Elect. Cap. 100uF +/-20%	1	C906	
15	O		211-011008-001X0	Power Transformer EI28 Si	1	PT902	⚠
16	O		25-1303-G01V --X	TRANSFORMER PWB KB4E (4 I	1		⚠
17	O		12P9-0062----X	CONN ASSY B2512HV-9P P=2.	1	CW903	
18	O		12P4-0248-1---V	CONN ASSY PH-4P PLUG P=2.	1	CW902	

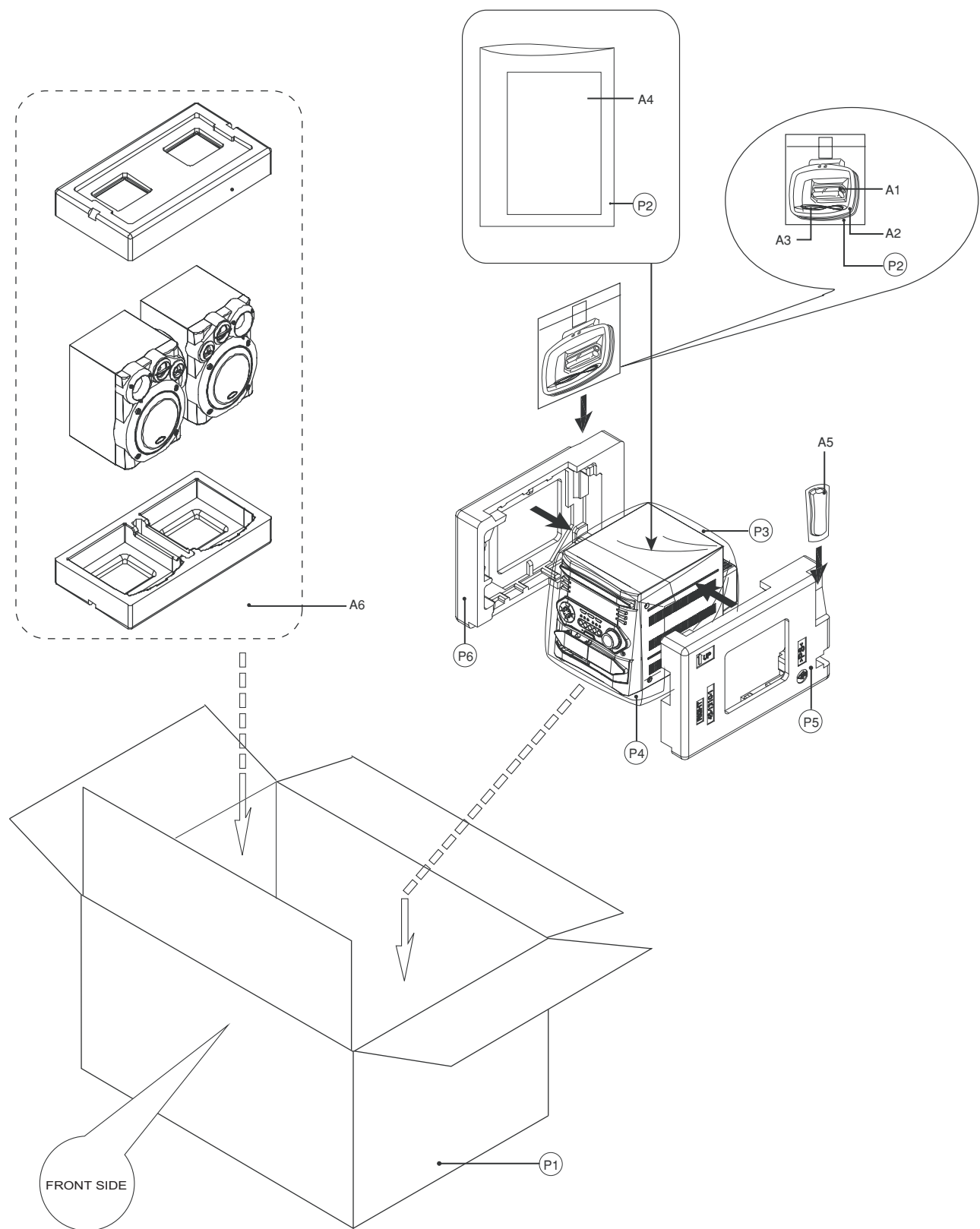
## ASS'Y Parts List

Item	PWB TOP	PWB Bottom	Part Number	Description	Q'ty	Location	Remark
1			12-0529-1----Y	FF-CABLE 16P P=1.00 L=148	1		
2			12P3-0215----V	3PINS PLUG CONN ASSY PITC	1		
3			14-0100-2----V	AC POWER CORD ASSEMBLY	1		⚠
4			250-110157-001X0	double cassette (ADR268DS	1		
5			4-0289-1-----X	FUSE, 1.6A 250 T 218	2	F901,F902	
6			5-30-9E-----X	SUM-3 Battery (recycleabl	2		
7			AN-0131-1----Y	ANT,WIRE FM EZ/K L=1500 [	1	FM ANT WIRE	
8			AN-0103-1----V	AM LOOP ANT 7T-1200mm MAR	1	AM LOOP ANT	
9			251-030095-100X0	3CD MECHANISM CMS-FR3BN	1		
10			12-0627-1----Y	FF-CABLE 11P P=1.25mm L=(	1		
11			12P8-0102----Y	8PINS PLUG CONN ASSY PITC	1		
12			18A-0018-1----X	FERRITE BEAD 25 x15 x15	1		
13			1-1820-1-----X	IC STK412-430-E	1	IC601	
14			12-0625-1----Y	FF-CABLE 22P P=1.25mm L=(	1		
15			12-0691-1----Y	FF-CABLE 16P P=1.25mm L=2	1		
16			211-011099-002W0	Power transformer 230V EI	1		⚠
17			600-MD338*-02SX0	Remote Control unit,MCX-3	1		
18			30-0723-01-01-02	Mounting Lug (PG CW-2) (C	3		

### Critical component List

Item	PWB TOP	PWB Bottom	Part Number	Description	Q'ty	Location	Remark
1	O		20-1196-01-01-X1	Fuse Holder (87-A90-160-0	4	F901,F902	
2	O		20-1323-01-01-X1	Terminal 1P MSC (TERMINAL	2	TB901,902	
3	O		8-RL-0013-1--X	RELAY,12V G5PA-1-8 [OMRON	1	RL901	
4	O		211-011008-001X0	Power Transformer EI28 Si	1	PT902	
5			211-011099-002W0	Power transformer 230V EI76	1		
6			25-1303-G01V--X	TRANSFORMER PWB KB4E (4 I	1		
7			25-1288-G01V--X	PWB KB4 POWER AMP THK=1.6	1		
8			25-1419-G02V --X	PWB MAIN 245x195mm T=1.6m	1		
9			25-1421-G02V--X	FRONT BOARD 94V0 SIZE:163	1		
10			14-0100-2-----V	AC POWER CORD ASSEMBLY	1		
11	O		4-0289-1-----X	FUSE, 1.6A 250 T 218	2	F901,F902	

■ Packing materials and accessories parts list





**Parts list (Packing)**

	Item	Parts number	Parts name	Q'ty	Description	Area
	P1	430-002160-000X0	Master Carton	1	for ANT LOOP/IB for UNIT	
	P2	470-011844-000X0	Polybag	2		
	P3	470-011099-001X0	Polybag	1		
	P4	450-011145-001W0	SH, FOAMED-MAT	1		
	P5	450-011392-000X1	Poly Form RIGHT	1		
	P6	450-011391-000X1	Poly Form LEFT	1		

**Parts list (Accessories)**

	Item	Parts number	Parts name	Q'ty	Description	Area
	A1	5-30-9E-----W	UM-3 Battery	2		
	A2	AN-0103-1-----V	ANT LOOP	1		
	A3	AN-0131-1-----Y	WIRE ANT	1		
	A4	440-001538-000W0	INSTRUCTION MANUAL	1		
	A5	600-MD338*-02SX0	Remote Control UNIT	1		
	A6	644-MD3382-02SV0	Speaker System	1		